MILITARY DISCIPLINE,
OR THE YOUNG
ARTILLERY MAN.
WHEREIN
Is Diſcourſed and Showne the
Poſtures both of *Muſket* and *Pike* the exacteſt way, &c.

Together with the Exerciſe of the Foot in their *Motions*, with much variety: As alſo, diverſe and ſeverall *Formes* for the *Imbatteling* ſmall or greater *Bodies*, demonſtrated by the number of a ſingle *Company*, with their *Reducements*.

Very neceſſary for all ſuch as are Studious in the Art Military.

Whereunto is alſo added, the *Poſtures* and *Beneficiall Uſe* of the *Halfe-Pike* joyned with the Musket. With the way to draw up the *Swediſh Brigade*.

As alſo, MARS *his Triumph*.

The fifth Edition, Newly Reviſed and Inlarged.

BY

Collonel WILLIAM BARIFFE.

Pſal. 144. 1. *Bleſſed be the Lord my ſtrength which teacheth my hands to warre, and my fingers to fight.*

LONDON:

Printed and are to be ſould by *Andrew Kembe* at St. *Margarets* Hill in *Southwark*.

1657.

BARRIEF ÆTATIS SVÆ * 42
VERA EFFIGIES GVILIELMI
Though this Effigies here does Represent
and Portray forth his faces Linzament
Yet Read his Booke and you therin will find
that he hath Pictur'd there a Soldiers minde

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TO THE

RIGHT HONORABLE *ALGERNON*,

Earle of *Northumberland*, Lord of the *Honours* of *Cockermouth*, and *Petworth*, Lord *Percy*, *Lucy*, *Poynings*, *Fitzpaine*, *Bryan*, and *Latimer*, Knight of the Noble Order of the *Garter*, Lord High Admirall of *England*, *Ireland*, and *Wales*, and of the *Dominions* and *Iles* of the same, of the towne of *Calet*, and *Marches* of the same, of *Normandy*, *Gascoigne*, and *Aquitaine*, Lord Generall of the Navy, and Seas, of the said Kingdomes of *England* and *Ireland*, one of the Lords of his *Majesties* most Honourable Privie Councell, and Lord Lieutenant of *Northumberland*, *Cumberland*, and *Westmerland*.

Right Honourable,

THe *Glory* of the *Meridian Sunne* is the more resplendently set off by the *foile* and *darknesse* of a *Shadow*; which is a perpetuall *follower* of his *light*: as my *ambition* in all humble service, is devoted to Your Lordship. The memory of so many *Heroicall Ancestours*, as (in all *Ages*) have enobliz'd your *potent Family*; together with their *Martiall* and *Renowned atchivements*, doe for ever stand recorded in the *Booke* of *Honour* and *Fame*. And that (were occasion fairely offered) your Honour hath *Spirit* and *Bravery* enough, in a *Military emulation*, to arrive up to the height of their *glory*: your constant and noble *Deportments* (as well in your private *carriage*, as of late in your publicke *Triumph*, when you were *installed* into that most *Noble Order* of the *Garter*) doe most evidently presage of you. This as it hath attracted all eyes and expectations: So hath it encouraged my *low ambition* (amongst the rest) to esteeme your Honour a fit Patron for a Booke of this Nature. Your *innate* and *inbred Vertues*, together with that *Courtesie*, *Noblenesse* and *Affability*, (the inseparable *Companions* of *Anciently descended Honour*) speake you so easie of accesse, that my *Young Artillery-Man* despaireth not of acceptance and admission to kisse the hands of your *Great Lordship*. The *first fruits* it is of my weake *endeavours*, and the experiments of my private observations. Such as it is, my humble request to your good *Lordship*, that out of the accustomed *freedome* and *goodnesse* of your *nature*, you would be pleased to daigne *acceptance* of it: Even the *acceptance* and *patronage* of this fifth *Edition*, as you pleased to doe of the foure former. Which as it may be an ample testimony of the continuance of your *Honorable favours* to the *Authour*, So this my *Dedication* shall give *assurance* to the World of the continuance and redoubling of my former *devotions* and *obligations*; and how well I was pleased that so great a *Peere* vouchsafed the *Patronage* of the former. And I withall beseech your *Honour*, to give *pardon* unto that *presumption*, which hath proceeded from *devotion*. I confesse it an *ambition* in me, to *soare loftily* in my *Dedication*; But as *Alexander* sometimes, refused not a meane *Present* of *Fruit* from the hands of a simple *Gardiner*: so my hope is, your *Honour* will hold me excused for offering so *worthlesse* and *meane* a *Mite* to so *great* and *Honourable* a *Personage*. Especially, considering that the *subject* of my *Discourse* is intended for the *bettering of the Souldiers knowledge of the trained Bands*; and that your *Lordship* is one of his *Majesties Lieutenants*, it may prove a good *inducement* to your *Honours* liking (who are knowne to bee so great a *lover* of your *Countrey*) to *vouchsafe* the *Protection* and *Patronage* of these my endeavours, whereby I shall for ever stand *obliged* in all *humility*, and remaine,

Your Honours *most humble and devoted Servant*

WILLIAM BARRIFFE.

To the Right Worſhipfull, Sir *Ralph Boſvile*, Knight: Captain of a Select Company of *Foote* in the County of KENT.

YOu may be pleaſed to remember (Noble Sir) how often you have importun'd *me to* write ſomething *by way of inſtruction) for the* bettering of the judgements of ſuch young Gentlemen and Souldiers, whoſe minds ſtand this way affected. *And although (for my owne part) I can better mannage the* Pike *than the* Pen: *yet that I might not be wanting in all acknowledgement, I have taken upon me to ſatisfie your requeſt; which ſhall ever carry the* authority *of a* command with it. *Expect not (I beſeech you Sir) to find my* Book *ſet forth with* fine phraſes, *nor to be deckt with* hiſtoricall diſcourſes *of* forraigne fought Battailes; *this being the onely thing by me intended in it, to ſet forth the* exact grounds *of this our* moderne diſcipline, *for the exerciſing of a* foote Company. *Nor is it to be eſteemed a* ſmall advancement *to the knowledge of the* Art Military; *even to have taught this* little, *ſeeing it muſt be confeſſed to have beene one of the chiefeſt* meanes, *to make* Philip *from a* poore Prince *to become a* powerfull Monarch; *and his Sonne* Alexander, a mighty Conqueror. *I meane his* exact obſervance *of the* true grounds of Military Diſcipline, *which beginneth with the* inſtruction *of a* private Company.

Adde hereunto (which I have alſo touch'd upon) his frequent practiſe, *and inuring of his* Souldiers to the Uſe of Armes; *together with* his well ordering *and* contriving *the ſeverall* formes *and* figures *of his* Battels. *Alwayes* (by the way) *obſerving how to make his* advantage, *either from the* time, *the* number, *or the* place, *or ſome other ſuch like* opportunity. *But not to cloy your* quainter eares *with* impertinent diſcourſes: *who are not onely a* Maſter of Armes, *but of* Arts; *alſo a Gentleman that hath beene* Captaine *either over* horſe *or* foote, *for the ſpace of theſe laſt* forty yeeres: *and from your very* infancie brought *up in the very* boſome *of the* Muſes. *So that you are now become a* Neſtor *for Counſell, an* Apollo *for* Muſicke, *and a* Mars *for the* Field. *But leſt by Acknowledging your* worthy parts *(your* native modeſty *being ſuch, that you never love to heare your own* due deſerved prayſes) *I purchaſe a* frowne *for a* recompence: *I forbeare. My humble deſire now is, that your* Worſhip *will be pleaſed to accept of my* well meaning: *and although I be wanting in* Artfull expreſſions, *yet to reſt aſſured that I am yours in all* humble *and* hearty affection, *and ſhall ſtill continue*

Yours,

WILLIAM BARRIFFE.

To all the Worthy Collonels, Lieutenant Collonels, Majors, and Captaines of the City of *London*.

Especially unto those that are, and continue Members of the *Artillery-Garden*.

The Right Worshipfull PHILLIP SKIPPON, Esquire, Serjeant Major Generall, of all the Forces of *London*, and Captaine of that Ancient and Worthy Society exercising Armes in the *Artillery-Garden*.

Red Regiment.

Collonel *Thomas Atkins*, Alderman.
Lieutenant Collonel *Rand. Manwaring*
Serjeant Major *William Tucker*.
1. Cap. *William Tomlson*.
2. Cap. *Edward Hooker*.
3. Cap. *Laurence Bromfield*.
4. Cap. *Rich Hunt*.
Coll. Captaine *George Mosse*.

White Regiment.

Collonel *Isack Pennington*, Lord Major of *London*.
Lieut. Collonel, *Robert Davis*.
Serjeant Major, *Thomas Chamberlaine*.
1. Cap. *Thomas Player*.
2. Capt. *Christopher Whichcott*.
3. Capt. *William Manbie*.
4. Capt. *Joseph Vaughan*.
Coll. Capt *Richard Venner*.

Yellow Regiment.

Collonel *John Wollaston*, Knight and Alderman.
Lieut Coll. *Ralph Harrison*.
Serjeant Major, *Richard Cuthbert*.
1. Capt. *Robert Tichburne*.
2. Capt *Walter Lee*.
3. Capt *William Hitchcock*.
Coll. Capt *John Brett*.

Blew Regiment.

Collonel *Thomas Adams*, Alderman.
Lieut. Coll. *Francis West*.
Serjeant Major, *William Underwood*.
1. Cap. *Edward Bellamie*.
2. Capt *John Booker*.
3. Capt *George Dipford*.
4 Capt *William Colefon*.
Coll. Capt. *Edward Clegitt*.

Greene Regiment.

Collonel, *John Warner*, Alderman.
Lieut. Coll *Matthew Foster*.
Serjeant Major, *Owen Roe*.
1. Capt. *Matthew Sheppard*.
2. Capt. *Francis Roe*.
3. Capt. *Robert Mainwaring*.
Coll. Capt. *Thomas Iuxon*.

Orenge Regiment

Collonel, *John Towse*, Alderman.
Lieut. Coll: *Rowland Wilson*.
Serjeant Major, *Nathaniel Canfield*.
1. Captaine, *Thomas Gower*.
2. Captaine, *Richard Wollaston*.
3. Captaine, *Miles Pettie*.
Collonel Captaine.

Right worthy *Collonels* and *Captaines*:

ALthough it is commonly found, that every man by a kind of affection, love to magnifie and most to extoll those things, whereunto hee findes his minde most naturally inclined. Yet all such patiality and private affection laide apart, the love to my Countrey gave the first heate unto this Worke. And the rather I was induced thereunto, because I held my selfe obliged; that my small Rivolet ought to make an ackowledgement, or retribution to the Ocean, whence my poore Streames were first derived. And therefore in the first place to your selves; who are the *Collonels, Lieutenant Collonels, Majors*, and *Captaines* over the *Trained Bands*, and are not onely the choicest flowers of our City, but also of the *Artillery-Garden*: unto whom I was first beholding for the *Rules* and *Rudiments* of my *Military Instruction*.

And therefore Right worthy *Commanders* and *Captaines*, accept of this my acknowledgement; neither suffer any misconstruction to passe upon it, or to impute it otherwise then to my *gratitude*. For this fifth publishing of my worthlesse *Worke*, I hope I shall give none of you offence, by reason that I know it is your *earnest desire* that (if it might be) *all his Majesties faithfull Souldiers* and loving Subjects might be made perfect, both in the *Practick* and *Theorie*, and all other *necessary requisites* pertinent to the *Art Military*.

This is dayly manifested unto us, by your *frequent* bearing of *Armes* on *Generall dayes*; whereby you not onely give a *powerfull* and *good example* to others, warming the *sterility* of the *coldest affections*; but like so many *studs of imbellishment*, you garnish and adorne the *body of our Militia*. Persist then *worthy Captains*, in so brave an intendment, and *immortalize your Posterities*, by ingraving your *Names* in the booke of *Honour*; who neither want *skill* nor *courage*, to *merit* with those, whose *legends* have filled the *Tramps* of *Fame*. But I have soared beyond the modest bounds of your *Deportments*, for which I crave your pardons: by which you will further indeere

For Yours, WILLIAM BARRIFFE.

TO THE READER.

COurteous *Reader*, although I have ſet forth this ſmall *Treatiſe*, principally ayming at the benefit of my *Country*, yet I know that ſome will not be *wanting*, to diſparage both the *Workman* and the *Worke*, the matter and manner. For ſuch is the *miſery* of the *times*, and the malice of men; that the frothy Depraver, ſhall *finde* (in ſome men) an opinion of his *worth*, by detracting into other mens merits: For mine owne part I ingeniouſly confeſſe, that amongſt many in our owne *Ground*, I was the meaneſt, both for skill and Schollerſhip, to have undertaken a worke of this Nature; but being continually preſt by my Acquaintance: ſome for the *Poſtures*, others for the *Motions*, and by ſome againe for *Figures*, I being alwayes willing to further men this way affected; granted and gave to ſome men Coppies, and ſuffered others to peruſe my Notes, which I had placed in an old waſte paper Book. But at length, Time, and mens tongues togeather, had begot an opinion, that I had writ a *Booke*. Which was ſo *freely divulged*, that I was requeſted by ſome to know when it would come forth of the *Preſſe*, when as yet I had not the leaſt *conceit*, to put *Pen* to *Paper* tending to this purpoſe. So that being ingaged ſomething in my credit, and withall requeſted by a Right Worthy *Knight*, then my *Captaine*, who had power to *Command*: and laſtly, being thruſt on by the importunity of ſome of my familiar friends: I have put my *Card* amongſt the reſt into the bunch to be ſhuffled: not much caring where it be *dealt*, ſo it be not mixt with the ——— If any carpe at the *plainneſſe* of the *ſtile*, I conceive that it fits beſt with the Subject; workes of this Nature chiefly requiring it. If ſuch, whom opinion hath made proud, and cuſtome, captious, ſhall happen to be my Superviſors, to them I ſay, that it is eaſier to finde faults than mend them; and to mend *Books* than to make them. But to the *courteous* and *skil-full*, whoſe better parts will yeeld better fruits, I ſhall requeſt their favourable cenſure and that with their judgements, they will mend what by over-ſight I have miſt. For which their *loves*, I ſhall ever ſtand *ingaged*: and remaine

Their thankfull Friend and Servant,

WILLIAM BARRIFFE.

To my worthy Friend the Author.

HE that commends too poorly doth dispraise,
And those good parts he so commends, betrayes:
A silent admiration is the best,
When words fall short, whereby should be expresst,
What we conceive, for faint and bare Commends
Meant for a praise, misse utterly their ends.

Ralph Bosvile, Knight.

Ad Amicum suum ingeniosum, *Gulielmum Barriffe*, Authorem.

ZOile venenatæ jaculari cuspide Linguæ,
Nil valet; hic vensunt Pallas *&* Arma *simul.*
O quàm securus Liber hic, qui Martis & Artis
Palladiæ *sacro Numine tutus erit!*

To his much deserving Friend the Author.

A Souldier? and a Scholler? who did see
Mars and *Minerva* both in one agree.
Why come and see, loe here is one hath spent,
His time in *Mars* 'is, and the *Muses* Tent;
Both Say, and Do, how few can? but here (lo)
He that doth Say so much, can much more Do.
By's Practise, and his Precepts thou maist see,
And learn to know, and Do as much as He.
What others get with paines, charge, hazard, harms,
Here may be learn'd with ease; the use of Armes.
Zoilus may catch and carp, now here, now there,
But thou't beyond his Tongue-shot, never feare;
Thou that dost dread nor pikes, nor guns, nor swords
Dread not the blasts of barking *Momus* words.
Goe on my Friend, and let there spring from our
Artillery Garden many such a Flower.

Samuel Carleton.
Lieut. Colloncl.

To my loving Friend the Author.

HOmer eterniz'd is for writing, what
Achilles and his *Myrmidons* did at
The Siege of *Troy*, I envie not his fame,
But needs must future Ages greatly blame,
If they forget to Memorise thee too,
That show'st not what was done, but how to do.

Another of the same.

OUr *Author* now the fifth time treads the *Stage*
Of *Mars* wherein he merits equipage
With any he, that characteriz'd with pen,
The neat'st Contrivements to Imbattle men.
Woe's me, or him, or that State that shall misse,
A Brother, Friend, a *Man of War* like this.
This *Gardner*, that's adorned with more *flowers*
Of Discipline; then is the year with houres.

Rowland Gwin
Licutenant.

On his much Honored friend the Author.

AS *London* (*Englands* farre-fam'd Emporie.)
In her brave Garden of *Artillery*;
With reason glory may, because therein
Is exercis'd exacter *Discipline*,
By Motions and apt firings than is done,
In any other place of Christendome;
So may that Garden as deservedly,
(*Accompliſt Barriff*) joy and boast of thee,
Although here stil'd, *The Young Artillery Man*,
Of thy abounding modesty, yet can
Thy skill or courage thereby vailed be
No more, than Sun beames by a Tyffanie:
Why young? Is't cause thou'lt still a Learner be?
Even so must all that ayme at Excellency;
New accidents and expert mens direction,
Brings th'art of war still nearer to perfection.
'Tis said great *Alexander* wept, for that
He no more worlds could finde to subjugate,
And yet if he before *Ostend* had beene,
He might have easier wept then entred in;
Because by late Experiments he'de find,
That Art, grown universall and *refin'd*,
That Art of Arts which claimes the Diadem,
As the prime meanes to gaine bright honours gem.
And such where by the *Romans* sword acquir'd,
The world its Monarchy, and so admir'd.
And fear'd, it made them known to be, that all
(Besides themselves) they did *Barbarians* call
All which addes to thy worth, for tutering men
Therein by Postures, Motions, Voyce, and Pen:
And in a way so plaine, yet exquisite,
And all compriſing that is requisite.

Foor

For forming of Choice Squadrons, that thy merit
Will to the end of time renown inherite;
Because the skilful'st Leader can no more
Then teach men how to fight (and march before)
With best advantage; yet saw I thee doe
A Captaines Office, and a Souldiers too,
In first Commanding what thou would'st do; And
Being first in executing such command
With such exact dexterity, as none
Could say thou cam'st short in perfection
To Forraign Disciplíners neere or far,
Though daily train'd up in the Schooles of War.
Yet as th'art modest in thy Title, so
Th'art in displaying what thou treat'st of too,
For thou adorn'st not thy books Frontispiece,
With glorious Titles to endeare its price,
As th' Art of Warre, or Souldiers Academy:
Nor more pretendest then a *Company*
Or *Squadrons exercise*: and yet *a way*
To see a greater Body in Array
Thereby discover'st. Onwards then, and stead
Thy Nation, by supplying (at her need)
Thy Country with large *Troopes* well disciplin'd.
For which *Occasion* will hereafter finde
A meane to Crown thy *merit*. Whilst thy friends
Wish thy *Designes* acquire their hop'd for ends

Ja: Haward *ex hospitio Graiensi*, Arm.

To his much esteemed Friend, and fellow Souldier, the AUTHOR.

CRitick, observe thy distance, censure not,
Nor spend thy judgement like an Ideot
That nothing knowes; If knowing, know thou then
Thou must be ranck't amongst the envious men
If once thou dost attempt to contradict
The matter that this booke containes in it:
The Methods plain; not deckt with complements,
Those frivolous, idle, needlesse supplements:
The substance ponderous is; no fond conceit
Affronts thee friend. With shame they shall retreat;
And so retreat, as not to charge againe
In Front, in Reere, or Flankes. Thou shalt disdain
All Formalists, that fain would Souldiers seem,
Who much expressive are: in judgement green.

Andrew Wheatly. Ex hospitio Grai

In Amicum Gulielmum Barriff.

YOung, and so old in *Marshall Discipline?*
Distrust will say, This worke is none of thine.
But I that know it, will averre the same
To be thine owne, and not anothers fame.
A Noble *Souldier* scornes to be so base
By others Worth to purchase his owne Grace.
And such is *Barriffe*: What his Book doth speak
It is his own: let Envie swell and break.

Amicus H. Peto

An *Anagram* and *Acrostick* on his loving Friend, *Collonell*

Anagramma. } WILLIAM BARRYFF
I fill fame by Warre.

I *f* Lilly, Camden, and *Learn'd* Vdall's *name*
F *inds memory still, and fills the trump of* Fame
I *n framing Rules for Youth, that might them teach*
L *earn'd Arts in tongues above the common reach*
L *et then* Wars rudiments, *that here are brought*
F *or* Englands *good; by none be set at nought*
A *nd scorn'd: for they in time will make renoun'd*
M *en studious in this* Art, *and their acts crown'd*
E *ndure: He that in* Warre *will seeke to gain,*
B *e perfect must in all, and that retain.*
Y *oung though our* BARRIFF *be, yet this his Book*
W *ill speak him old, if well thereon you looke.*
A *ll* Postures *for the* Musket, *and the* Pike
R *eformed are by him, and eke the like*
R *esin'd in* Motions *all, they there do stand*
W *ith* formes *and* firings *framed to your hand.*
I *n* Band *or in a* Regimentall *way:*
L *ook here, and soon a* Figure *form you may.*
L *ove to his Countrey, and our* Gardens *fame,*
I *n time prevail'd with him, to let* This fame
A *gain to* Presse *be brought; O let not then*
M *ad rage, rash censure of proud ignorant men*
B *e prevalent: but let the learn'd, the just,*
A *nd eke the noble: yea all those that must*
R *enowned be, and will gaine* Fame *by* Warre,
R *egard what's good, forbear harsh doom: then far*
Y *our fame will flye, and we incourag'd shall*
F *rom* Barriffs Young Artillery Man *seeke all*
F *or honours Wreath: and to* fill Fame by War,
E *v'n here in* England, *and abroad full far.*

Thomas Whitley, *Lient.*

MILITARY DISCIPLINE:

OR,

The Young ARTILLERY Man.

CHAP. I.

Concerning Poſtures, and handling of Armes.

THe firſt Rudiments of education, wherewithall to enter young *Souldiers*, which deſire to be inſtructed in that part of the *Art Military*, which concerneth the *Infantry*, (or *Foot-Souldiers*) ought to be *the well-mannaging and handling of their Armes*; which may eaſily be attained by frequent *Practice*, and the *Souldiers* thereby be brought to uſe them with *eaſe*, *ſafety*, and *delight*: where to the contrary (without *exerciſe*) the *eaſieſt Armes* become not only troubleſome burthens unto the *unskilfull bearers*, but too often prove dangerous and hurtfull, both to themſelves, and fellowes, that *ranke* and *file* with them. Neither need any be *diſheartened*, for no man is born a *Souldier*, nor can attain to any excellency in the *Art Military* without *practice*: But by *practice* is gained *knowledge*; *knowledge* begets *courage* and *confidence*; few or none being *fearfull* to *execute* what by *freqnent practice* they have throughly *learned*.

And therefore it will be neceſſary for every one, that intends any *proficiency* in this part of the *Art Military*, firſt to be *inſtructed* in the *Poſtures* and wel-*handling* of their *Arms*; (a thing much to be deſired in our *Trained Bands*, though ſmall hope of amendment, ſeeing that our *Souldiers* are ſcarce called *forth* to *exerciſe* either *Poſture* or *Motion* once in foure or five yeares. Whoſe the fault is, I know not: *only I pray God that it may be amended, leſt ſhame and infamy be the leaſt of evils which our careleſſe ſecurity may bring upon us*: Yet pardon this digreſſion, for my zeale to my Countries good had almoſt tranſported me beyond the bounds of my intent; but of this no more. I will now come to the *Poſtures* of the *Muſket* and *Pike*:) which ſome conceive, are fitteſt to *begin* from the *taking up* of their *Armes*, and *arming* the *Souldiers*, concluding them with the *laying down* of their *Armes*, or *diſarming* them. Nevertheleſſe, becauſe that ſome (eſpecially ſuch as have been in the parts beyond the Seas) have not accuſtomed themſelves to any ſtrict obſervance of *Poſture*, for the *arming* and *diſarming* of the *Muskettier*, but, after the manner of the *field*, come *ready charged* and *ſhouldred*, and ſo from thence making the entrance or beginning to the *Poſtures*; by which meanes others have been emboldned too cenſoriouſly to object againſt the reſt, as ſuperfluous: which they themſelves, at ſome time or other, cannot avoid. Therefore to the end that they alſo may have ſatisfaction, I have ſo placed the *Poſtures* of the *Muſket*, that they may make uſe of ſo many of them as they ſhall thinke neceſſary, and leave the reſt to ſuch as require a more exact and ample ſatisfaction. But before I expoſe the *Poſtures* to the publike ſurvay, me thinks I heare ſome already enquiring, What is *Poſture?* Wherefore, that I may ſatisfie them, and not be troubleſome to others, in briefe thus,

Poſture in a Souldier is, the garbe or figure that hee uſeth in the handling of his Armes, conſiſting of ſeverall Motions for atchieving of each Poſture. The Motion being the working part; the Poſture, the alteration or act, either in circumſtance or matter: As, to reſt your Muſket being one Poſture, to ſhoulder your Muſket another; ſo likewiſe for the reſt. The definition of Poſture.

Howbeit, ſome perchance will object (as formerly hath been to one of *Athens*, making a long Oration in the praiſe of *Hercules* his valour) and ſay, Who ever doubted of it? So to me, Who ever queſtioned theſe for *Poſtures?* Yet I have known them not only queſti-

oned, but written againſt; peremptorily concluding, that there are but three *Poſtures* to be uſed for the *Musket*: whoſe errors I ſhall eaſily confute. But more of this after the *Poſtures* of the *Musket*. Wherefore for the more orderly proceeding, conceive their *Arms* to *lie before them on the ground*, and then the firſt *command* will be, to *ſtand to their Arms*.

The manner of *Arming* the *Muskettier*, and *Poſtures* of the *Musket*.

Take up your } *Bande-*
Put on your } *liers.*

Take up your }
Place your } *Match.*

Take up your Musket and Reſt.

Reſt your Musket.

Now, if you pleaſe, you may performe your ſaluting *Poſture*.

Poyſe your }
Shoulder your } *Musket.*

Take your Reſt into your right hand, and you are armed ready to March.

Thus being *armed*, with *Muskets ſhouldred*, ſome account their *Poſtures* to begin from this place; wch may be done either *ſtanding* or *moving*, as they ſucceſſively follow.

Take your Match between the fingers of your right hand.

Put your Reſt ſtring about your left wriſt, and carry your Reſt in your left hand.

* *Set the But-end of your Muſket on the ground ſome (though improperly) call, Ordering the Musket.*

Returne your Match between the fingers of your left hand.

Unſhoulder your Musket and poyſe.

Joyne your Reſt to the outſide of your Musket.

Open }
Cleere } *your Pan.*
Prime }
Shut }

Caſt off your looſe Cornes.

Blow off your looſe Cornes, and bring about your Musket to the left ſide.

Traile your Reſt, and ballance your Musket in your left hand.

Charge with Powder.

Draw forth } *your Scow-*
Shorten } *ring Stick.*

Charge with Bullet.

Put your Scowring Sticke into your Musket.

Ram home your Charge.

Withdraw }
Shorten } *your Scowring Sticke.*
Returne }

Bring forward your Muſket and Reſt.

Poyſe your Musket, and recover your Reſt.

Thus having *charged*, ſome men will *ſhoulder*, and ſo from thence *make ready*; beginning their *Poſtures* from the *unſhouldering* of the *Musket*: accounting of thoſe paſt, as *Motions of Poſture*: But they doe but tangle themſelves in their owne ſnares: therefore I proceed.

Joyne your Reſt to the outſide of your Musket.

Draw forth your Match.

Blow your Coale.

Cock }
Fit } *your Match.*

Guard your Pan.

Blow the Aſh from your Coale.

Open your Pan.

Preſent upon your Reſt.

Give fire breſt-high.

Diſmount your Musket, joyning your Reſt to the outſide of your Musket.

Uncocke, and returne your Match.

Cleere }
Shut } *your Pan.*

Poyſe }
Shoulder } *your Musket.*

Take your Match between the fingers of the right hand.

Take your Reſt into your right hand, cleering your ſtring from your wriſt.

Returne your Reſt into the left hand, the ſtring looſe.

Returne your Match into your left hand.

Unſhoulder your Musket, and poyſe.

Reſt your Musket.

* *Set the But-end of your Musket on the ground.*

Lay down } *Musk. & Reſt.*
your } *Match.*

Take off }
Lay down } *your Bandeliers*

March from your Armes.

[a] *The Sentinell Poſture.*

There is likewiſe the [a] *Sentinell Poſture*, which is, The *Muskettier* having his *Musket charged* with *bullet*, his *Match cockt*, his *Pan guarded*, *ſtands* with his *Musket reſted*, ready to performe ſuch *duty* as ſhall be *commanded*, or given him in *charge*. Some have likewiſe taught to *make ready* on, or from the *Sentinell Poſture*: But note, that as none comes to *ſtand Sentinell*, but comes ready *charged*; ſo if any occaſion happen that he muſt

give

give fire in the time of his *ſtanding Sentinell*, it cauſeth an *Alarm* to the *Quarter*, or *Corps du guard*, from whence hee is ſet out; ſo that he will have no fit time to *make ready upon his Reſt*. Wherefore I conceive it ſuperfluous; but will ever conform to better judgement.

We have alſo the [a] *Funerall Poſture*, which from the *Reſt* is to be performed at three *Motions*, but cannot ſo well be expreſt in *writing*, as it will expreſſe it ſelfe in *action*. Wherefore ſeeing that it is rather an Ornament to Obſequies, than truly neceſſary for *Armies*, I will not ſpend more time about it, but come to the *Poſtures* of the *Pike*. Yet before I paſſe upon them, give me leave to anſwer ſome, which out of a criticall humour, will alwayes be carping at others, condemning theſe *Poſtures*, ſaying, there are more by halfe, then are either good or uſefull: and that there are no more *Poſtures* to be uſed, but *Make ready, Preſent, Give fire*. The which we will not deny, that in *Service* there are any other Commands *uſefull*: notwithſtanding I would have them to know, that [b] *Make ready* is no *Poſture*, but a word of *command*, including all *Poſtures* from the firſt *arming* of the *Souldier*, to the *Preſent*: or, if the *Muskettier* be *charged, ſhouldered*, or *both*, then the word (*Make ready*) *commands* the proſecution of the reſt of the *Poſtures*, which are between the *Poſture* you then immediatly are at, when the *word* is given, and the other *Poſture, Preſent*: For which reaſon, when we teach *Muskettiers* at firſt, it is moſt neceſſary to inſtruct them punctually, from *Poſture* to *Poſture*; which being once attained, they will *mannage their Armes* more *ſurely*, more *comely*, with more *celerity*, and with better *execution*; and at the firſt may eaſily be taught the beſt way. [c] But if they have once got an habit of being ill, there will be as much or more paines ſpent in reclaiming their errors, as at firſt to teach them the beſt, ſafeſt, and readieſt way.

[a] *The Funerall Poſture.*

[b] *Make ready, no Poſture, but a word of Command.*

[c] *Ill cuſtome hardly reclaimed.*

CHAP. II.

Of the Poſtures of the Pike.

THat which followeth next of courſe, is the *Poſture* of the *Pike*: Wherefore, that wee may obſerve *Order* in our proceeding, wee will likewiſe conceive their *Pikes* to lie in like manner before them on the ground: And then, as before, the *firſt command* will be, to *Stand to* their *Armes*.

Handle / *Order* } *your Pikes.* | *To your* { [d] *Open* / [e] *Cloſe* } *Order.*

Charge from the Foot.

Which is to *charge* with the *But-end* of your *Pike* at the *inſide* of your *right foot*, your *Pike* in the *left hand*, drawing your *Sword* over the *left arme*.

Charge to the { *Right.* / *Left.* / *Reere.* }

Order your Pikes, and put up your Swords.

Note that theſe *Charges at the Foot*, are to *receive a deſperate enemy on Horſe*, upon a *ſtand* in ſome *ſtrait*, or other *place of advantage*, the *Muskettiers to give fire over the Pikemens heads*, or *elſewhere*, at the diſcretion of the *Commander*.

From Order { *Port* / *Comport* / *Cheek* / *Traile* } *your Pikes.* } Order as you were.

Charge to the { *Front.* / *Right.* / *Left.* / [f] *Reer.* } Order as you were.

Shoulder your Pikes.

[d] *Open Order, in reſpect of Poſture for the Pike, is when the files ſtand at double diſtance, or open Order at the leaſt; then the Pikemen are to extend their right arms, and place their Pikes about a foot to the right of their right legs: it is uſefull only to make a gallant ſhew.* [e] *Cloſe order is to place the But-end of the Pike on the in-ſide of the foot, and is only uſefull upon a ſtand, to receive and abate the fury of the Horſe upon a deſperate charge.* [f] *Charge to the reer is to be underſtood alwais to the left-about, becauſe it is 3. times a nearer way then charging to the right-about.*

Advance your Pikes.

From Advance { *Port* / *Comport* / *Cheeke* / *Traile* } *your Pikes.* { Advance as you were. }

Charge to the { *Front.* / *Right.* / *Left.* / *Reer.* } { Advance as you were. }

Shoulder your Pikes.

From the Shoulder { *Port* / *Comport* / *Cheek* / *Traile* } *your Pikes.* { Shoulder as you were. }

Charge to the { *Front.* / *Right.* / *Left.* / *Reere.* } { Shoulder as you were. }

From *Comport*, *Cheeke*, or *Traile*, the *Pike-man* may, at the diſcretion of the *Commander*, *charge* either to the *Front*, *Reere*, or *Flanks*, as ſhall be neceſſary, or thought expedient. I will doe it only once over, for the *Charges* will be all alike, whether you *Comport* from *Order*, from *Advance*, or *Shoulder*. And ſo likewiſe for *Cheek* and *Traile*, *&c.*

From Comport Charge to the { *Front.* / *Right.* / *Left.* / *Reere.* } { Comport as you were. }

Traile your Pikes.

From the Traile Charge to the { *Front.* / *Right.* / *Left.* / *Reere.* } { Traile as you were. }

Cheek your Pikes.

From the Cheek Charge to the { *Front.* / *Right.* / *Left.* / *Reere.* } { Cheek as you were. }

Order / *Lay down* } *your Pikes.*

I ſhall undergoe the cenſure of ſome, for that they will find more *Poſtures* of the *Pike* here then formerly they knew of, and ſo by their concluſion more then there is any need of; for now-adayes there are ſuch that will limit the *Diſcipline* of the *Militia* to the verge of their own knowledge; and whatſoever elſe they ſhall ſee either *acted* or *written* by others, that is without the liſts of their *kenning*, they will peremptorily conclude for ſuperfluous, and improper; howſoever, I ſhall alwayes referre my ſelfe to the judgement of the more judicious.

The uſe of the Pike.

The *Charges* of the *Pike* are *twofold*, either for *Defence*, or *Offence*: *Charges underhand*, or *over-hand*: but divers and different they are from their ſeverall *wayes* and *Poſtures* from which they are, or may be done, although they are not alwayes *uſefull*, yet at ſome times they may be *uſefull*; and therefore very requiſite to be knowne of all ſuch as either are, or at leaſt would be accounted for *good Souldiers*.

As I have ſet down the *Poſtures* themſelves both of *Musket* and *Pike*, ſo it were not amiſſe, if that the *Motions of Poſture* were likewiſe here expreſt. But becauſe they will take up too much time, and fill too much paper, and the ſubject it ſelfe not pleaſing unto many, I will ſpare my labour, and my booke the lines, rather ſuffering the cenſure of curtaild brevity, then tedious prolixity.

CHAP. III.

Of the Drum.

OUr *Souldiers* being ſufficiently *inſtructed* in the *Poſtures* of ſuch *Arms* as they *carry* (or are appointed to uſe;) the next thing they are to *learne* is the *knowledge* of the *ſeverall beats* of the *Drum*, which is as requiſite to be *learnt* of the *Souldier*, as any thing elſe in this *way*. For the *Drum* is the *voyce* of the *Commander*, the *ſpurre* of the *valiant*, and the *heart* of the *coward*; and by it *they* muſt receive their *directions*, when the *roring Canon*, the *claſhing* of *Armes*, the *neighing* of *Horſes*, and other *confuſed noiſe* cauſeth that

hat neither *Captain*, nor other *Officer* can be *heard*. Therefore it will be necessary that eve-
y Souldier should learn these six severall Beats, *viz.*

1 A Call. 2 A Troop. 3 A March. 4 A Preparative. 5 A Battaile. 6 A Retreat.

1 By a *Call*, you must *understand* to *prepare* to heare present *Proclamation*, or else to re-
aire to your *Ensigne*. *A Call.*

2 By a *Troop*, *understand* to *shoulder* your *Muskets*, to *advance* your *Pikes*, to *close* your
Ranks and *Files* to their *Order*, and to *troop along* with (or *follow*) your *Officer* to the *place* *A Troop.*
f *Randezvous*, or else-where.

3 By a *March* you are to *understand* to *take* your *open order* in *rank*, to *shoulder* both
Muskets and *Pikes*, and to direct your *March* either *quicker* or *slower*, according to the *A March.*
eat of the *Drum*.

4 By a *Preparative* you are to *understand* to *close* to your *due distance*, for *skirmish* both
n *ranke* and *file*, and to *make ready*, that so you may *execute* upon the *first command*. *A Preparative.*

5 By the *Battaile* or *charge*, *understand* the *continuation* or *pressing forward* in *order* of
attaile without *lagging behind*, rather boldly stepping *forward* in the *place* of *him* that *A Battaile.*
alls dead, or *wounded*, before thee.

6 By a *Retreat*, *understand* an *orderly retiring backward*, either for *relief*, for *advantage* of
round, or for some other *politicall end*, as to *draw* the *enemy* into some *ambushment*, or such *A Retreat.*
ke. Much more might be written concerning the *Drum*, but this may suffice for the present.

Chap. IV.

Of Ranks and Files, their places and dignities.

NOw that our *Souldiers* are somewhat *skilfull* in *managing* of their *Armes*, and no
lesse capable of the severall *beats* of the *Drum*, it is high time for them to know the
fference *between a Rank and a File*. Wherefore know, that *a Rank is a row of men, some-*
mes more, sometimes fewer, standing, moving, or marching even a breſt, or (as some write) *What is a*
ouldron to pouldron, or *shoulder to shoulder*. *A File is a sequence of men, standing one behind* *Ranke.*
nother, back to belly, in a straight line from Front to Reere, consisting sometimes of 6. 8. or *What is a*
. men, on some occasions the *Spainards* make them 12. *deep*. But when any one would *File.*
ew much *variety* of *exercise*, then 8. will be the more *pliant* and *dividuall number*; yet for *Where men*
rvice in the *Field*, where men are not altogether so *expert* (as I could wish our Country- *are expert,*
en were) 10. men is a fit number, not only for the cause aforesaid, but also because that 10. is *8 is a sufficient depth,*
e *square Root* of a 100. and is a convenient number to draw *Companies* into *grosser bodies*. *and may*
And now I thinke it would not be much amisse, if I should insert the severall *places* of *better keep*
gnity and *precedency* in *Rank*, as also in *File*. Wherfore because that **Files* are first to be *their order*
awn forth, and that by *adding* or *joyning* of *Files together*, *Ranks* are *made*; we will be- *then when*
in *first* with the precedence of *Files*. Therefore conceive their *dignities* according to the *they are*
gures (or *Numbers*) hereunder *placed*, first in *File*, then of *Rank*, lastly of *both conjoyned*. *deeper.*

**In placing your men, first draw your Souldiers forth in files, and not in rankes, as some have fondly used.*

Front.

Front.	Number of dignity.	Number of dignity.	
1. P 1.	2 6 7 3 4 8 5 1	2 6 7 3 4 8 5 1 0	
2. P 5.	P P P P P P P P	P P P P P P P P 1	
3. P 8.	8 7 6 5 4 3 2 1	8 7 6 5 4 3 2 P 5	
4. P 4.	Number of place.	Nũber of place. 3 P 8	
5. P 3.		4 P 4	
6. P 7.		5 P 3	
7. P 6.		6 P 7	
8. P 2.		7 P 9	
Reere.		8 P 2	

Number of place. Number of dignity. Nũb. of Place. Number of dignity.

It will not be (of it ſelf) ſufficient that I have here both *marked* and *figured* each ſing *worth*; thereby pointing out the ſeverall *places* and *dignity*, *proper* to each *particular ma* in his *file* and *rank*: but it will be expected of ſome, that I ſhould back my *Concluſions*, ther with ſound and ſolid reaſons of mine own, or at the leaſt with the concurring opinio of others. But as for ſuch, who have employed themſelves upon this *Subject*, either f want of due conſideration, or a rationall underſtanding the *parts of a File*, they have vot their *judgements* as divers as their *number*; each man having a fancy to his own *way*. A if it were much *materiall*, I might here demonſtrate unto you the ſeverall opinions of *L Robertellus*, *Count* Mansfield*, Sir *Tho. Kellie*, and many others: but their works being e *tant*, I will ſpare the labour. Nevertheleſs I will ſay thus much, that *Captain John Bingha* although ſomewhat *obſcurely*, yet in my judgement hath beſt delivered himſelf concerni this particular: which although he hath expreſt by way of *Tetrarchies* and *Mirarchies*, t ſame may be underſtood as well by *Ranks* and *Files*. His words are theſe: "* *Eve* "*Tetrarch is over four Files, in all which the Commander that hath the right, hath the fi* "*place; he that hath the point of the left, the ſecond place; he that ſtandeth on the right ha* "*next to him, the third place. The laſt place is his, that ſtandeth next to the Commander* "*the right point on the left hand: He demonſtrates it by way of figure thus.*

* *A Booke ſet out in his name, but none of his.*

* *In the Tactick's of Ælian. lib. 1. the notes of the tenth Chapter.*

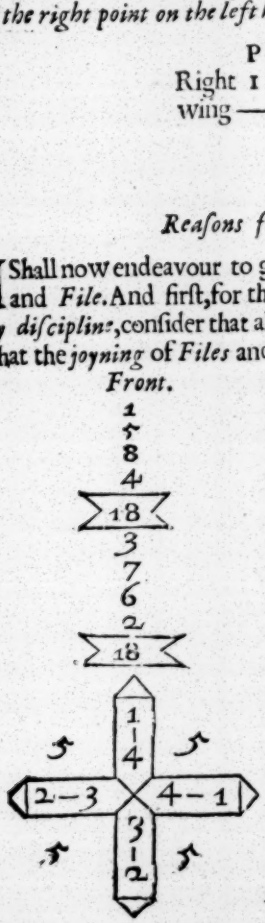
	P M M.	M M P.	P M M.	M M P.	
Right wing	1 5 1	4 8 4	3 7 3	2 6 2	Left wing.

The Middle.

CHAP. V.

Reaſons for precedency of dignity in Ranks and Files.

I Shall now endeavour to give ſome reaſons for theſe *ſeverall places* of *dignity* in *Ran* and *File*. And firſt, for that Geometricall proportion, gives both *life* and *being*, to *orde ly diſcipline*, conſider that all *parts* of the *body* ought to be *anſwerable*. Wherefore ſeei that the *joyning* of *Files* and *Ranks* produceth *greater bodies*; it is neceſſary that a true pr portion ſhould be kept from the *beginning*: and that in *dra ing forth* of *Files*, they obſerve to make the *reer-halfe-file* a ſwerable in *skill* and *worth* to the *front-half-file*: and that t *file-leaders*, & *half-ranks* of the *left-flank* ſhould be equivale in *worth*, *skill*, and *valour*, to the *right-flank*; that the *reer diviſion* hold like proportion with the *front diviſion*, and th all parts of the *body* be *ballanced* with true proportion, near as the knowledge of the *Souldiers*, and the *number* of t *men* will give you *leave*; and that there may be correſpondenc in their *worth*, *place*, and *dignity*, you may obſerve by addin the *figures* of *number* together which are in the *margent*, whe you ſhall find, that the *dignity* being added together of the *fro halfe file*, makes the number of 18; and the worth of the *ree half* being in like manner added makes the like *number*. So all ſhall you find the *dignity* and *worth* of the *file-leaders* of th *left-flank* to parallel the *worth* of thoſe on the *right-flank* b the ſame rule. If you will have it yet more cleare, obſerve th the *file-leader* is the *chiefe* in his *file*, the *bringer-up* the *ſecon* the *half-file leader* the *third*, the laſt man of the *front half fi*



e *fourth*. Now note, that as the *worth* of the *firſt precedes* the *ſecond*, ſo the *worth* of the *ird exceeds* the *fourth*: Adde the *firſt worth* to the *fourth worth*, and that makes *five*; de the *ſecond worth* to the *third*, and it makes the ſame *number*: ſo that there is *equa-y* throughout the *battel*, both in *front*, *reere*, and *flanks*: for it were unreaſonable, that the *chiefe men* ſhould be on the *right-flank*, and all the *worſt* on the *left*; for the *left* uſt be *oppoſed* to the *enemies right*. The *file-leader* ought to be the *worthieſt* becauſe e hath the *command* of his *file*, and *marcheth firſt againſt* his *enemy*. The *bringer-up* ght to be the *ſecond*, becauſe his *place* of *march* is in the *reere*, and is in moſt danger, ould the *enemy charge* on that *part*: the *halfe-file-leader* is the *third* in *honour*, be-uſe that when the *halfe-file is taken off* upon any *occaſion*, he is the *leader* (unleſſe ey be *commanded* to *face about*) the *laſt man* of the *front-half-file* is the *fourth* in *dig-ty*, for when the *reere-diviſion* is *taken off*, then he is the *bringer-up*, or the *file* being ced about, he is the *half-file-leader to the reere*: the next *man* to the *file-leader* hath the *t place* of *honour*, for that one *doubling brings him into the front*: the next *man before* e *bringer-up*, hath the *ſixt place* of *honour*, for that if the *body* be *faced about*, one *doubling ings him into the front accidentall*, or keeping the *proper front* by once *doubling* of *ranks*, becomes *bringer-up* to his *file-leader*: the *ſeventh place* of *honour* is his, that *marcheth* xt after the *half-file-leader*, for that when the *half-files double the front*, or *marcheth forth* en one *doubling ranks him even* with the *front*: the *eighth* and *laſt place* of *honour* is *his*, at is the *third* from the *front*, the *file* being but eight *deep*, which may alſo be *made a file-ader* though with more trouble than the reſt; for by *countermarching front and reere o the midſt*, and then *facing* to the *former front*, and after *doubling* of *ranks*, makes him kewiſe *a file-leader*. Now, as *every mans dignity is more or leſſe in his file, ſo is all his ranke ith him*. Wherefore this that hath already been ſaid, may ſuffice to inform thoſe which as re ignorant of the ſeverall *places of dignity*, both in *rank and file*. Nevertheleſſe, for the arer *demonſtration* of theſe *rules of dignity, and for that they are of more concernment, n at firſt every man can imagine*, I have drawn forth *three tables*. The firſt of *ſix deep* d *ſix* a breſt: the ſecond of *eight deep*, and *eight* a breſt: the third of *ten deep*, and *ten* a eſt: which will ſhew the particular *dignities* due to each man in *rank* and *file*. I have alſo ded *three other ſquare tables*: the firſt of *thirty ſix men*, the ſecond of *ſixty foure*, the rd of *one hundred*. And in *each table* I have ſhewed every *mans place* of *dignity* in *file* d *rank*, as alſo in the *joyned body*, from the *firſt* and *chiefe* to the *laſt* and *leaſt* in *dignity*, figures of number, with an addition of their ſums together, to ſhew their *uniformity*, d proportion to each other.

The Places of Dignity of 10. *in Rank.*

2	6	0	7	3	4	8	9	5	1

The Places of Dignity of 8. *in Rank.*

2	6	7	3	4	8	5	1

Places of dignity of 6. *in Rank.*

2	6	3	4	5	1

Rules of Dignity ought not to be regulated by ill cuſtomes, conceited opinions, and falſe grounds; but by truth and reaſon.

Places of dignity of 6. *in File.*

5
4
3
6
2

5
8
4
3
7
6
2

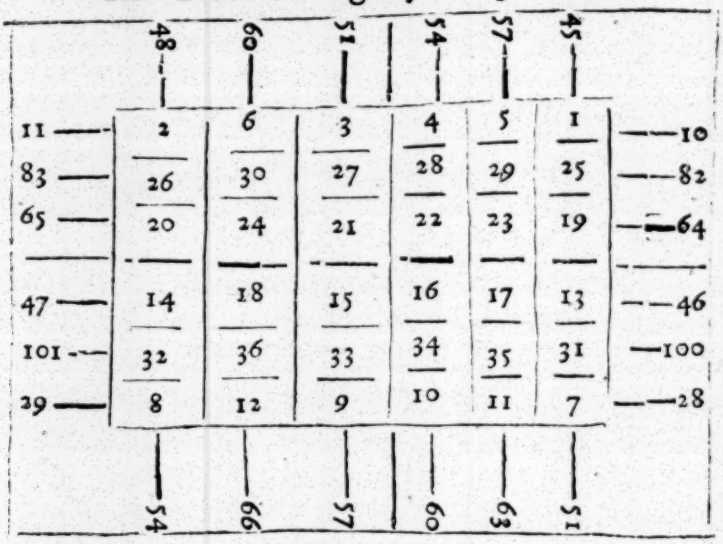
The places of dignity of 8. *in File.*

1
5
9
8
4
3
7
0
6
2

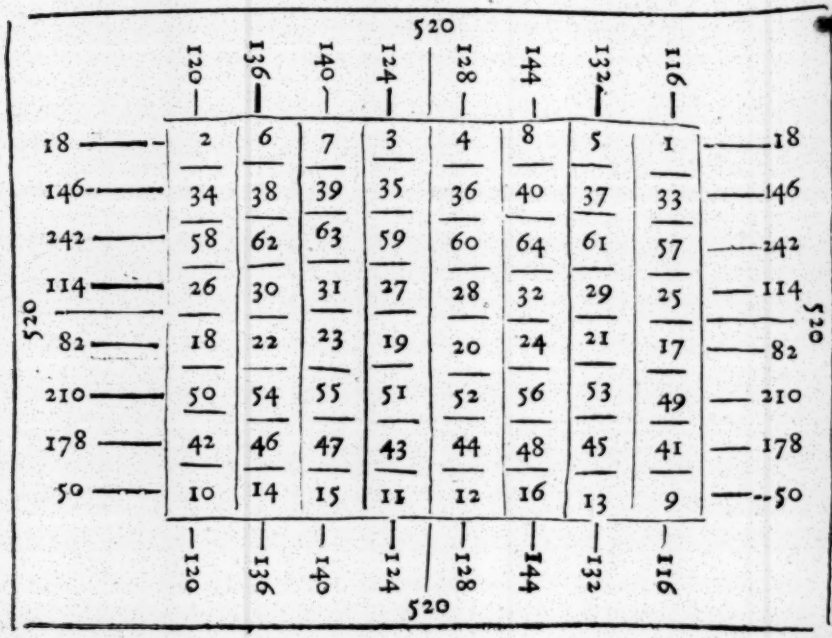
The Places of Dignity of 10. *in File.*

The

The Table of Dignity for 36. Men.



The Table of Dignity for 64. Men.



The

The Table of dignity for 100. men.

	230—	250—	270—	255—	235—	240—	260—	265—	245—	225—	
28 —	2	6	10	7	3	4	8	9	5	1	— 27
228 —	42	46	50	47	43	44	48	49	45	41	— 227
428 —	82	86	90	87	83	84	88	89	85	81	— 427
378 —	72	76	80	77	73	74	78	79	75	71	— 377
178 —	32	36	40	37	33	34	38	39	35	31	— 177
128 —	22	26	30	27	23	24	28	29	25	21	— 127
328 —	62	66	70	67	63	64	68	69	65	61	— 327
478 —	92	96	100	97	93	94	98	99	95	91	— 477
278 —	52	56	60	57	53	54	58	59	55	51	— 277
78 —	12	16	20	17	13	14	18	19	15	11	— 77
	—240	—260	—280	—265	—245	—250	—270	—275	—255	—235	

If you please to make an experiment of the *uniformity* and *proportion* that one *file* or *rank* holdeth with another, and would first make triall of a *file*, then *adde the number of one file together*; (which done) *adde the numbers* together of the next *file in dignity*, into one summe; then *substract the lesser number out of the greater*, and you shall alwayes find, that [a] *one file precedes the other* no more then there are particular *places in a file*: as 6. in *files* of 6. *deep*, 8. in *files* of 8. *deep*, and 10. in *files* of 10. *deep*; the which makes no disproportion, but are onely *numbers of distinctions*.

Would you make an experiment *between the dignity of rank and rank*? then, as before, adde the *simple numbers* together of *one rank*, the which being found, adde the *simple numbers* together of the next *rank* in *dignity*; the which in like manner being performed, *substract the lesser number out of the greater*, and you shall find the remainder alwayes to be the *complete number of the square body*. * As for example, in the table of *thirty six*, *adde the numbers of the first* rank (or *File-leaders*) together, and you shall find by addition twenty one; adde the numbers of the second *rank* in *dignity* (which are the Bringers up) together, and you shall find fifty seven: then *substract* the number of the *first rank* from the *second* in *dignity*, and the remainder will be thirty six, the just *number of the whole square*. And so in like manner is the number of difference between every two next *ranks of dignity* in that Table. The other Tables, in like nature, having the same difference, according to the number of the body; either of thirty six, sixty four, [b] or one hundred. But I doubt I shall be blamed for tedious curiosity, because I have insisted longer upon this *Subject* then at first I intended; which makes me the more willing (though somewhat abruptly) to break from it, and come to shew the manner of *joyning* or *drawing up of files into Battalia*. To which purpose, the *Serjeants* are first *to draw forth their files*, and after *to lead them up into order*, according to every mans *worth* and *honour*; as, first *the right-hand file*, then *the left-hand file*, and so *the other files* successively *within them*, according to their severall *worths* and *places*: as by the following *form*, and the *figures* of number, you may plainly perceive.

[a] *Files precede each other in dignity according to their places. Each man in the right hand file preceding him of the same place in the left hand file, which makes the difference of number between them 6. at 6. deep, 8. at 8. deep, &c.*

* *The difference between every next rank of dignity in the table of 36. is the same number.*

[b] *In the table of 64 the difference between the next ranks of dignity is 64. In the table of 100. the difference is the like number of 100. &c.*

Front.

Dignity of place.

Left Flank. Number of place.										Right Flank. Dignity of place.
0	2	6	7	3	4	8	5	1	0	
1	M	M	M	M	M	M	M	M	1	
2	M	M	M	M	M	M	M	M	5	
3	M	M	M	M	M	M	M	M	8	
4	M	M	M	M	M	M	M	M	4	
5	M	M	M	M	M	M	M	M	3	
6	M	M	M	M	M	M	M	M	7	
7	M	M	M	M	M	M	M	M	6	
8	M	M	M	M	M	M	M	M	2	
0	8	7	6	5	4	3	2	1	0	

Number of place.

Reere.

If there be *any* that ſhall ſay, Theſe are *niceties*, and of no *repute* amongſt *Souldiers*: I dare ſay, they have been well *reputed* of by good *Souldiers*; no diſparagement unto the *fault-finders*, (if there happen to be any ſuch.) As for the *noble*, *worthy*, and *well-knowing Souldiers*, I am almoſt *confident*, that out of their true-ſpeaking *judgements*, they will either conclude that it is ſo *uſed*, or at the leaſt, that it *ought* ſo to be; but if this can *work* no *effect* with the — I leave every man freely to his own *judgement*, deſiring the *judicious* alwayes to hold a favourable opinion of my well-meaning.

[a] *Ignorant Souldiers moſt ambitious.*

CHAP. VI.

Of ſeverall diſtances.

NOw that our *Souldiers* have attained ſome ſmall knowledge in the uſe of their *Arms*, (me thinks, like ſome of our [a] *little knowing Souldiers* of the *Trained Bands*) they already begin to be ambitious of *File-leaders* places; therefore, that their own *weakneſſes* may light them to read their own *follies*, we will ſee how they will behave themſelves in the exerciſe of the Company. Where the firſt thing wee are to inſtruct them in, is their *diſtances*. But becauſe it is diſputable, whether *diſtance* be one of the *Motions* or no; we will firſt declare what *diſtance* is. To which I ſay, that indeed [b] *diſtance* it ſelfe is no *motion*, but there is *motion* in producing ſuch *diſtance*; for, *Diſtance is the ſpace of ground between man and man, either in file or ranke, having relation onely to the place between each party*: All the reſt of the *motions* having not onely relation to the one, but to the other. Wherefore, not to ſpend more time in a matter ſo apparent, we will ſay, that the *Diſcipline of a foot Company conſiſts chiefly in diſtance and motion*. And therefore ſeeing that *diſtance* is the fore-runner of *motion*, and that [c] no *motion* can be performed without *diſtance*, we will leave to diſcourſe it, and fall to the matter it ſelfe, and ſhew how many ſorts of *diſtance* is ordinarily uſed in our *modern diſcipline*; which are theſe *foure* hereunder named, *viz.*

[b] *Diſtance it ſelfe no motion.*

[c] *Without diſtance no motion can be performed.*

Diſtance of rank is to be underſtood between rank and rank.

Diſtance of file is to be underſtood between file and file.

The exact place from whence to meaſure your diſtance is from the center of your men, whether it be rank or file.

Cloſe Order,	*which is*	*One foot and a halfe.*	
Order,	*both in*	*Three foot.*	
Open Order,	*Ranke*	*Six foot.*	
Double Diſtance,	*and File*	*Twelve foot.*	

It hath been the opinion of ſome ancient Commanders, that the *diſtance of rank* was alwayes *double the diſtance of file*, although they went both under one and the ſame denomination: As that, *Order* in *file* was *three foot*, *Order* in *rank ſix foot*; *Open Order* in *file ſix foot*, *Open Order* in *rank twelve foot*; and ſo of other *diſtances*. But the beſt received opinions hold them to be alike both in *rank* and *file*. There is to be conſidered in *diſtance* theſe *three eſpecially, that is, *diſtance* for *march*, *diſtance* for *motion*, & *diſtance* for *skirmiſh*.

[*] *Theſe 3. diſtances eſpecially remarkable.*

You

You are to obſerve, that your *diſtance for march* is to be *three foot between file and file, and ſix foot between ranke and ranke; diſtance for motion ſix foot both in ranke and file; diſtance for intire doublings, wheelings, and skirmiſh, three foot in ranke and file. Cloſe order is uſefull* for your *files of Pike-men*, when they are to receive a *Charge* from the *horſe:* that ſo they may *ſtand* the *ſtronger*, by ſo much as they are the *cloſer ſerried together:* as alſo for the rankes of *Muſkettiers*, when they are to poure on a ſalue of ſhot.

It next followes, that I ſhew the *divers words of command*, and direction; for the ſeverall *openings* and *cloſings* of *ranks* and *files*. But I ſhall firſt recommend to the care of the *curious diſcipliner*; that in the firſt place he *command his Souldiers* to *even* their *ranks*, and *ſtreighten* their *files:* to be *ſilent*, and *attentive* to their *words of command*, and *direction:* which being performed, the *words of command* for *diſtance*, are as followeth.

Rankes and files to your cloſe order.

Files open to the right / *Rankes open forward* } *to your order.*

Files open to the right / *Rankes open forward* } *to your open order.*

Files open to the right / *Ranks open forward* } *to your double diſtance.*

Files cloſe to the right / *Ranks cloſe forward* } *to your open order.*

Files cloſe to the right / *Ranks cloſe forward* } *to your order.*

Files cloſe to the right / *Ranks cloſe forward* } *to your cloſe order.*

Files open to the left / *Ranks open backward* } *to your order.*

Files open to the left / *Ranks open backward* } *to your open order.*

Files open to the left / *Ranks open backward* } *to your double diſtance.* — *In motion of files you are to obſerve your Leader.*

Files cloſe to the left / *Ranks cloſe backward* } *to your open order.*

Files cloſe to the left / *Ranks cloſe backward* } *to your order.*

Files cloſe to the left / *Ranks cloſe backward* } *to your cloſe order.*

In motion of rankt you are to obſerve your right-hand man.

Files { *open* / *Ranks* { *to the* } *right and left* / *front and reer* } *to your order.*

Files { *open* / *Ranks* { *to the* } *right and left* / *front and reer* } *to your open order.*

Files { *open* / *Ranks* { *to the* } *right and left* / *front and reer* } *to your double diſtance.*

Files { *cloſe* / *Ranks* { *to the* } *right & left inward* / *middeſt* } *to your open order.*

Note that when *files open* to the *right*, the *left-hand-file* muſt ſtand *faſt*, every *file* taking his *diſtance* from the *file* next his *left hand*; And when they *open* to the *left*, then the *right-hand-file ſtands*, every *file* taking his *diſtance* from the *file* next his *right hand*. Obſerve alſo that when *ranks open forwards*, then the *laſt ranke* ſtands, every *ranke* taking his *diſtance* from the *ranke* next behind him: And when they open *backwards*, then the *firſt rank is to ſtand*, every *ranke* to take his *diſtance* from the *ranke* next before him. You are likewiſe to take notice in the *action*, that you are either to *face* to the *right*, or to the *right about*.

Obſervations for the opening of ranks and files.

Note alſo, that in *cloſing* of *files*, if it be to the *right*, then contrary to *the opening*, the *right-hand-file ſtands*, the reſt *cloſing* to the *right*, taking their *diſtance* from their *next right-hand-file*. If you *cloſe* to the *left*, then the *left-hand-file ſtands*, the reſt of the *files cloſing* to the *left*, taking their *diſtance* in like manner. When *files cloſe to the right and left*, then they *cloſe inward*, taking their *diſtance* from the *files* within them, nearer to the *middeſt of the body*. Alſo note, that when *files* are commanded to *open* to the *right* and *left* (or by *diviſion*) it muſt be *outward*. If *ranks cloſe to front and reere*, then the *firſt* and *laſt rank* ſtand, the others taking their *diſtances* from them. If they *cloſe ranks* towards the *center* or *midſt*, then they *cloſe* towards their *two middlemoſt ranks*.

Obſervations for the cloſing of ranks and files.

It is not required that every *Captain* or other *Officer* that ſhall *exerciſe* a *Company*, ſhall uſe all theſe ſeverall *openings* and *cloſings* which are here expreſt, but rather that he ſhall make uſe of ſo many of them, as he ſhall think fit for his preſent occaſion or *exerciſe*; although they all may be uſefull, at ſome time or other: I may ſpare examples, for it muſt needs be apparent to the meaneſt capacity.

CHAP. VII.

Of Marching the Company in Divisions, with the order and places of the Officers and Drums.

Front.
C.
M M M M
M M M M S.4.
M M M M
D.2.
M M M M
M M M M
M M M M
M M M M
E.
P P P P
P P P P
P P P P
D. 1.
P P P P
P P P P
P P P P
P P P P
P P P P
S. 1.
P P P P
P P P P
P P P P
D. 4.
P P P P
P P P P
P P P P
P P P P
P P P P
S. 2.
M M M M
M M M M
M M M M
D. 3.
M M M M
M M M M
M M M M
M M M M
S.3. M M M M
L.

OUr *Souldiers* now being somewhat *expert* in their *Distance* wee will next draw them forth into a *deep March*. Wherefo note, that our *Files* must be at *Order*, and our *Ranks* at *Open O der*: the *Muskettiers* of the *right Flank* are to make the *Van*, a to *March* next after the *Captaine*: The *Pikes* are to make t *Battell*, and to *march* after the *Ensigne*, either in one or two *Di sions*, according to their number. The *Muskettiers* of the *left Fla* (sometimes called the *second Division of Muskets*) make the *Ree Guard*; which is *led* commonly by the *second Serjeant*. Howbe if there be but one *Division* of *Pikes*, then the *eldest* (or chiefe *Serjeant leads* the *second Division of Muskettiers*. If the *Compa* be but small, then it is best to make but two *Divisions*, one of t *Muskettiers*, another of the *Pikes*. For the *placing* of the rest the *Officers*, you may perceive by the *Figure* in the Margent: Wher fore note, that M. stands for *Muskets*, P. for *Pikes*, D. for *Drum* S. for *Serjeants*, E. for *Ensigne*, L. for *Lievtenant*, and C. f *Captain*.

Note, If you have but three *Drums*, then let the *Drum* in t second *Division* of *Pikes* be wanting: If onely two, then upon *march* the first between the third and fourth *Rank* of the *Front D vision of Muskettiers*. The second between the third and four *Rank* of the second *Division of Pikes*.

Note, that between each *Division* in *march* there ought to *twelve foot distance*, six *foot* before the *Officer*, and six *foot* behi him.

CHA

CHAP. VIII.

Of drawing the Diviſions up into a ſquare.

WHen you would bring your *Body* againe into *Battalia*, command your *Front-diviſion* to make *Alt* or *Stand*; then give order to your *Enſign*, either by a *Serjeant* or by ſome *ſign*, to lead up the *firſt-diviſion* of *Pikes* on the *left* of the *firſt-diviſion* of *Muskettiers*, with his *Colours flying*, and the *Pikes* to continue *ſhouldred* ſo long as the *Drum* beats a *March*: But if it beat a *Troop*, then the *Pikes* are to *advance*, and *cloſe their Ranks forward to their Order*, and ſo the *Enſign to troop them up with his Colours fierld.* The eldeſt *Serjeant* is to lead up the *ſecond-diviſion* of *Pikes*: The ſecond *Serjeant*, in like manner, is to lead up the ſecond or *reere-diviſion* of *Muskettiers*; each *diviſion* ſtill *marching* up to the *left* of that *diviſion* next before it. The manner you may plainly ſee in the *Figure*; where the *Front-diviſion* is marked in the *Reere* with the letter F. The *firſt-diviſion* of *Pikes* with the letter G. The *ſecond-diviſion* of *Pikes* with H. The *ſecond-Diviſion* of *Muskettiers* hath in the *Reere* the letter I. The other *Figure* following, in forme of a *ſquare*, ſhewes their ſtanding, after the *Diviſions* are led up. All the *File-leaders* ſtanding even in *Front* together, making one *Rank*.

C.
M M M M S.4.
M M M M
M M M M
D.
M M M M
M M M M
M M M M
M M M M
M M M M
F.

E
P P P P
P P P P
P P P P
D.
P P P P
P P P P
P P P P
P P P P
P P P P
G.

S. 1.
P P P P
P P P P
P P P P
D.
P P P P
P P P P
P P P P
P P P P
P P P P
H.

S. 2.
M M M M
M M M M
M M M M
D.
M M M M
M M M M
M M M M
M M M M
S.3. M M M M
L. I.

E. C.

	2	6	7	3		2	6	7	3	4	8	5	1		4	8	5	1	
S.2.	1	M	M	M	M D.	P	P	P	P	P	P	P	P	D.	M	M	M	M	1 S.1.
	2	M	M	M	M	P	P	P	P	P	P	P	P		M	M	M	M	5
	3	M	M	M	M	P	P	P	P	P	P	P	P		M	M	M	M	8
	4	M	M	M	M	P	P	P	P	P	P	P	P		M	M	M	M	4
	5	M	M	M	M	P	P	P	P	P	P	P	P		M	M	M	M	3
	6	M	M	M	M	P	P	P	P	P	P	P	P		M	M	M	M	7
	7	M	M	M	M	P	P	P	P	P	P	P	P		M	M	M	M	6
S.3.	8	M	M	M	M D.	P	P	P	P	P	P	P	P	D.	M	M	M	M	2 S.4.

L.

CHAP. VII.

Of Marching the Company in Divisions, with the order and places of the Officers and Drums.

Front.
C.
M M M M
M M M M S.4.
M M M M
D. 2.
M M M M
M M M M
M M M M
M M M M
M M M M
E.
P P P P
P P P P
P P P P
D. 1.
P P P P
P P P P
P P P P
P P P P
P P P P
S. 1.
P P P P
P P P P
P P P P
D. 4.
P P P P
P P P P
P P P P
P P P P
P P P P
S. 2.
M M M M
M M M M
M M M M
D. 3.
M M M M
M M M M
M M M M
M M M M
S.3. M M M M
L.

OUr *Souldiers* now being somewhat *expert* in their *Distance* wee will next draw them forth into a *deep March*. Wherefo note, that our *Files* must be at *Order*, and our *Ranks* at *Open O der*: the *Musketiers* of the *right Flank* are to make the *Van*, a to *March* next after the *Captaine*: The *Pikes* are to make t *Battell*, and to *march* after the *Ensigne*, either in one or two *Div sions*, according to their number. The *Musketiers* of the *left Fla* (sometimes called the *second Division of Muskets*) make the *Ree Guard*; which is *led* commonly by the *second Serjeant*. Howbe if there be but one *Division* of *Pikes*, then the *eldest* (or chiefe *Serjeant leads* the *second Division of Musketiers*. If the *Compa* be but small, then it is best to make but two *Divisions*, one of t *Musketiers*, another of the *Pikes*. For the *placing* of the rest the *Officers*, you may perceive by the *Figure* in the Margent: Wher fore note, that M. stands for *Muskets*, P. for *Pikes*, D. for *Drum* S. for *Serjeants*, E. for *Ensigne*, L. for *Lievtenant*, and C. f *Captain*.

Note, If you have but three *Drums*, then let the *Drum* in t second *Division* of *Pikes* be wanting: If onely two, then upon *march* the first between the third and fourth *Rank* of the *Front D vision of Musketiers*. The second between the third and four *Rank* of the second *Division of Pikes*.

Note, that between each *Division* in *march* there ought to *twelve foot distance*, six *foot* before the *Officer*, and six *foot* behi him.

CHA

CHAP. VIII.

Of drawing the Divisions up into a square.

WHen you would bring your *Body* againe into *Battalia*, command your *Front-division* to make *Alt* or *Stand*; then give order to your *Ensign*, either by a *Serjeant* or by some *sign*, to lead up the *first-division* of *Pikes* on the *left* of the *first-division* of *Muskettiers*, with his *Colours flying*, and the *Pikes* to continue *shouldred* so long as the *Drum* beats a *March*: But if it beat a *Troop*, then the *Pikes* are to *advance*, and *close their Ranks forward to their Order*, and so the *Ensign to troop them up with his Colours fierld.* The eldest *Serjeant* is to lead up the *second-division* of *Pikes*: The second *Serjeant*, in like manner, is to lead up the second or *reere-division* of *Muskettiers*; each *division* still *marching* up to the *left* of that *division* next before it. The manner you may plainly see in the *Figure*; where the *Front-division* is marked in the *Reere* with the letter F. The *first-division* of *Pikes* with the letter G. The *second-division* of *Pikes* with H. The *second-Division* of *Muskettiers* hath in the *Reere* the letter I. The other *Figure* following, in forme of a *square*, shewes their standing, after the *Divisions* are led up. All the *File-leaders* standing even in *Front* together, making one *Rank*.

C.
M M M M S.4.
M M M M
M M M M
D.
M M M M
M M M M
M M M M
M M M M
M M M M
F.

E
P P P P
P P P P
P P P P
D.
P P P P
P P P P
P P P P
P P P P
P P P P
G.

S. 1.
P P P P
P P P P
P P P P
D.
P P P P
P P P P
P P P P
P P P P
P P P P
H.

S. 2.
M M M M
M M M M
M M M M
D.
M M M M
M M M M
M M M M
M M M M
S.3. M M M M
L. I.

E. C.

	2 6 7 3		2 6 7 3 4 8 5 1		4 8 5 1	
S.2.	1 M M M M	D.	P P P P P P P P	D.	M M M M 1	S.1.
	2 M M M M		P P P P P P P P		M M M M 5	
	3 M M M M		P P P P P P P P		M M M M 8	
	4 M M M M		P P P P P P P P		M M M M 4	
	5 M M M M		P P P P P P P P		M M M M 3	
	6 M M M M		P P P P P P P P		M M M M 7	
	7 M M M M		P P P P P P P P		M M M M 6	
S.3.	8 M M M M	D.	P P P P P P P P	D.	M M M M 2	S.4.

L.

Diſtance of *place*, and *motions* of the *body*, are a part of the *Art Military*, uſed for th *inſtructing* and *diſciplining foot-ſouldiers*; whereby to fit and enable them to the *quick true*, and *orderly* performance of all *formes* and *figures* of *Battaile*, as may beſt ſuit wi the *time*, *number*, *place*, and *diſcretion* of the *Commander*. And may rightly be divided i to theſe *five* generall heads, (viz.) *Diſtance*, *Facings*, *Doublings*, *Counter-marches*, an *Wheelings*, which have (not unaptly) been compared to the *five Vowels*; for as witho one or more of the vowels, no word can be ſpelled; ſo without one or more of theſe, ne ther *form*, nor *action* can be performed.

CHAP. IX.

What is meant by Facing, with the uſe of the word, whether to be uſed or refuſed.

BEfore we come to ſhew the variety of *Facings* in the action, I think it will not be a miſſe to ſpeak a word or two in the way of *definition*: What is meant by *Facing*? T which I anſwer, that, *Facing is a particular turning of the Aſpect from one part to ano ther, whereby the Front-proper becomes a Front-accidentall: and a Front-accidentall ma be reduced to his proper Front.* There are ſome ſo ſeemingly curious, that by no means the will allow of the word *Face*; concluding it altogether unneceſſary: and no other wor muſt be given but, *To the Right*, *To the Left*, &c. Yet I wonder that men will *ſtumble* a ſo ſmall a *ſtraw*, which cannot chuſe but be better uſed than refuſed: For the word *Fac* is but one ſillable, and quickly pronounced, and gives ſo clear an expreſſion of the intent o the *Commander*, that it concludes it neceſſary. As for example, Should you command *Company* to *Double Ranks to the Right*, and then command them *as they were*, and then ſay, *To the Left*, it might *puzzle* a good *Souldier* at the firſt to diſcerne whether he ſhould *face* or *double*. The like miſtake might be among *Counter-marches*: Wherefore I con- ceive that none can juſtly taxe it for ſuperfluous, [a] ſeeing the eaſieſt expreſſion hath alwayes been accounted for the beſt. Yet ſpare me, for my intent is not to over-ſway any man in his opinion, but rather to deliver mine; leaving all men freely to their own likings.

The word Face neceſſary to be uſed.

[a] *The eaſieſt and plaineſt inſtructions are alwayes to be preferred in the teaching young Souldiers.*

If my intent were to make a great Book with a little matter, I might then here inſert *figures* for every particular *Facing*, and their *Reducements* to their firſt *Poſture*; which would take up divers ſheets of paper, and to little purpoſe: For I ſuppoſe that every man that knowes any thing, may eaſily conceive the *Idea* of any ordinary *Facing* in his mind. Wherefore I will ſhew but one or two of the hardeſt. You are to obſerve, that for the true performance of [b] *Facings*, every man is to turn upon the *ball* or *center* of the *left-foot*, and to move from the ground onely with the *right*: The *left-foot* being the keeper of *rank* and *file*.

[b] *In the exerciſe of the motion of Facings, you are to be at open Order, in rank and file.*

When you face to any hand, in the reducement you are to returne by the contrary.

Face to the
- Right.
- Left.
- Right and Left.
- Right about.
- Left about.
- Right and Left inward.
- Right / Left } Angle.
- Foure Angles.

} *Face as you were.*

The *Front-halfe-files* ſtanding, it will be requiſite for the *halfe-files* to the *Reer* to doe as much by themſelves; whereby they will the more aptly perceive, how that the *Subdi- viſion* goeth under the denomination of the *halfe-files*, &c.

Halfe-

Halfe-files face to the { Right. / Left. / Right and Left. / Right / Left } about. / Right and Left inward. } *As you were.*

There is a word which is ordinarily used, and proper, for *reducements* of *Facings*, which is, *To your Leader.* *Face to your Leader, a word of Reducement.*

There is another *Facing* also sometimes *commanded*, which is, *Face to the Center*; and is most proper when the *body stands* in some *circular form*, or *hollow square*. Wee have also a *Facing* which causeth the Body to *face* to the *Front*, *Reer*, and *Flanks*, which some call, *Facing square*.

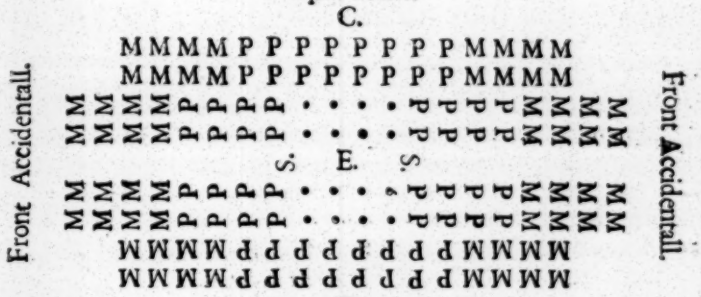
CHAP. X.

Of Facing square, and how to perform it; the usefulnesse of Facings, and the severall parts thereof.

WHen wee instruct our *Souldiers* how to *face square*, (if the *Body* be but 8. *deep*) command the *two first Ranks stand fast*, the *two last Ranks face about*, *the rest of the Body face to the right and left*. If the *Body* be *deeper*, we command more *Ranks* to the *Front*, and so likewise to the *Reer*. It will be very necessary for *young Souldiers* to move 10. or 12. *paces* upon every *motion* of *Facings*, whether they are *entire*, or *divisionall*. I will now prick two severall *figures* of *facing*, which will be sufficient to demonstrate all the rest.

The Command is, *Face square and march.*
The Direction is, *Two first Ranks stand.*
Two last Ranks face-about.
The rest of the Body, face to the right and left.
(then) *March all.*

Proper Front.



The Front of the Reere.

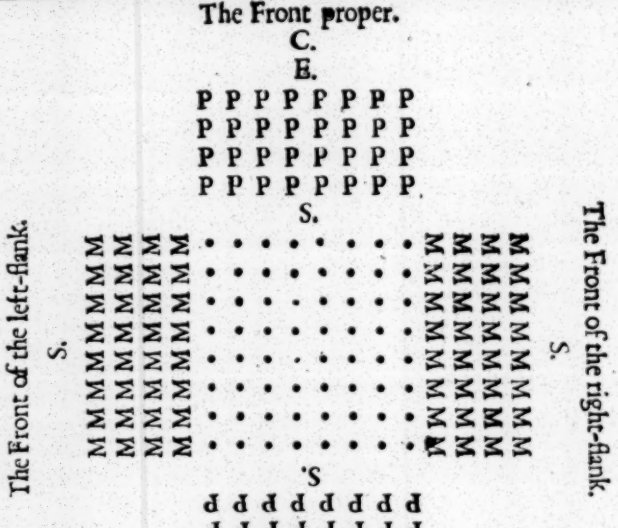
When your *Souldiers* begin any *motion*, let them *advance* their *Pikes*, and *shoulder* their *Musquets*. When they come to a *stand* (and have performed their *direction*) let them *order* their *Armes*; that is, to *rest their Musquets*, and *order their Pikes*.

To reduce them to their first order.

Face all about to the right, March and close your divisions.
Face all to your Leader, (who then stands at his *Front proper.*)
Facing square another way, and *Marching* upon it.

The Command is, *Face square, and march.*
The Direction is, *Musquettiers face to the right and left.*
(Next) *Halfe-files of Pikes, face-about to the right.*
(Last) *March all.*

The



To reduce this *Figure* to its former *order*.

Face all about to the Right, March and close your Divisions.

Face all to your Leader, and then they are reduced.

The necessity of Facings, and how usefull.

Facings are so *usefull* and *necessary* that you may as well dispense with any one of the *grounds* of this *Art*, as with them; for they are *usefull* almost upon all occasions, and more onely sooner *executed* then any other of the *motions*, but may be *needfull* when *Wheelings* and *Counter-marches* cannot be used, as in a *strait*. There are no more then *foure Facings intire*, besides *angular*; but *divisionall* there be divers: and indeed very necessary many of them be, as occasion may offer it selfe for their severall *uses*; howsoever, peremptorily to say, there be so many and no more, were too restrictive, and I conceive hath been concluded by none; but it still rests at the *discretion* of the *Commander*, to *exercise more or fewer of them*, as he best liketh, and the necessity requireth, either for *action* or *exercise*.

Intire. *Intire Facings* are so called, when the *aspect* of the *whole company* are directed one way.

Divisionall. *Divisionall Facings* are so called, when the *aspect* of the *souldiers* are at one and the same time *directed divers and severall wayes*; as, to the *front* and *reere*, the *right* and *left*, or to all *foure* at once, &c.

Angular. *Angular Facings* are so called, when the *aspect* of the *company* is directed to the *right corner* man, which is the *right-angle*, or to the *left corner* man, which is the *left-angle*, or to the *foure corner* men, which are the *foure angles*.

The use of Angular Facings. *Angular Facings* were of great repute among the Ancients, for their *figures* called *Diamond*, the *Wedge*, the *Sheers*, the *Saw*, and such like, when they made such *formes* of *Battell*: But in our *moderne discipline* I conceive them to be of little or no use, onely that we honour the memory of the Ancients, in their practice. And some say they are very good for *exercise*; for that by their use the *souldier* is made more *apt* and *perfect* in the other. Therefore let this suffice to be spoken concerning *Facings*, and now be pleased to turn your *aspect*, and take a *view* how our *young souldiers* will behave themselves in the performance of the *doublings*.

CHA

CHAP. XI.

Of Doublings, their uſe and parts.

Doublings are to moſt excellent and ſingular good uſe for the *ſtrengthening* of any part of the *Battell*, according to the occaſion, or diſcretion of the Commander; and *conſiſts* of theſe *two generalls*, *Doublings of length*, and *Doublings of depth*; all times in *quantity* of *number*, ſometimes both in *number* and *place*; both having this *reſtriction*, to be *doublings* of *ranks* or *flanks*: Every particular *doubling* pointing at one of theſe, although there be *ſundry* and *divers wayes* for the doing of them, each of them being to very good purpoſe, for ſome conſideration or other. *Doublings* of [a] *ranks*, from what *forme* ſoever it be done, doth make the *number double* ſo much as it was before; and ſometimes doth *extend* the *length* of the *Battell* to *double* the *proportion* of *ground* as well as *number*.

[a] *Doublings of Ranks always extending the length, either in number, or place, or both.*

Doublings of [b] *files* (or *flanks*) doe alſo *double* the *number* in *depth*, and ſometimes becomes a *doubling* both of *number* and *place*. Wherefore for the better underſtanding of *doublings*, obſerve with me theſe *ſix* uſuall wayes following.

[b] *Doublings of files (or flanks) always extending the depth, either in number, or place, or both.*

The ſeverall parts or branches of Doublings.

Doublings of	Ranks.	1.	Doublings of	The Reere.	4.
	Halfe-files.	2.		Files.	5.
	Bringers-up.	3.		Halfe-ranks.	6.

The firſt is the *doubling of ranks*, and is when every *even rank doubleth into the odde*. The ſecond is, when the *halfe-files double their ranks forwards into the front*. The third, when the *Bringers-up double their ranks forwards into the front*. The fourth, when the *front-halfe-files double the reere*. Theſe firſt foure being *doublings* of *Ranks*, the *length* of the *Battell* being by them *extended* either *ſimply* in *number*, or both in *number* and *place*. The next two are *doublings* of *flanks*; the firſt whereof is the ordinary *doublings of files*, every one of the *even files* being inſerted into the *odde files*, accounting from the hand named. The next is, the *doubling* of *halfe-ranks*, which is to be underſtood when one *flank doubleth the other*, either by *paſſing through*, *counter-march*, *doubling entire*, or *diviſionall*.

Note, that the diſtance for particle and diviſionall doublings is open order in rank and file. Note alſo, that the ordinary doublings of ranks and files is ou ought to be performed by three ſteps, firſt ſtepping forth with that foot which is next unto the place named, and in the reducement returne by the contrary hand.

You are to note in this *motion* of *doubling*, that as there is one part of the *body ſtands*, ſo the other part *moves*: the *ſtanding part* is to be *doubled*, the *part moving* are thoſe that *double*; as you may perceive by the *Figures*, which ſhew the manner of each *doubling*. That which next followes are the words of *command*, and *direction* for *doublings*, with the ſeverall *reducements* following next after them.

The words of Command for Doublings, with the Reducements.

Ranks to the {Right / Left} double. {*Ranks as you were.*} | Files to the {Right / Left} double. {*Files as you were.*}

Bringers-up, double your Ranks forward to the right.
Bringers-up, face-about to the left, march forth into your places.
Bringers-up, double your Ranks forward to the left.
Bringers-up, face-about to the right, march forth into your places.

Files to the right and left double {outward. / inward.} {*Files as you were.*}

Halfe-files, double your Ranks forward to the right.
Halfe-files, face-about to the left, march forth into your places.
Halfe-files, double your Ranks forward to the left.
Halfe-files, face-about to the right, march forth into your places.

Note that in doublings of ranks and files, if you double ranks to either hand, doub-

Front-half-files, face-about to the left, {and double the Reere to the right. / *March forth into your places.*}

ling of files to the contrary, reduceth them. Or in doubling of files to any hand doubling of ranks to the cõtrary will reduce them

Front-halfe-files face about to the right. } and double the reere to the left. *March forth into your places*

Front-half-files counter-march to the right. }
Front-half-files counter-march to the left. } and double the Reere.

The word of reducement for either, is, *Front-half-files, as you were.*

Halfe-ranks to the right, by counter-march double your left-flank.
Half-ranks that doubled face to the right, march forth into your places.
Half-ranks to the left, by counter-march double your right-flank.
Half-ranks that doubled face to the left, march forth into your places.
Half-ranks of the right, double your left-flank.
Half-ranks that doubled, face to the right, march forth into your places.
Half-ranks of the left, double your right-flank.
Half-ranks that doubled, face to the left, march forth into your places.
Half-files double your front to the right intire.
Half-files face about to the left, march forth into your places.
Halfe-files double your front to the left intire.
Halfe-files face about to the right, march forth into your places.
Halfe-files double your front inward intire.
Halfe-files face about to the right, march forth into your places.
Halfe-files double your front by diviſion.
Halfe-files face about to the right and left inward, march forth into your places.
Front-halfe-files double your reere by diviſion.
Front-halfe-files face about to the right and left inward, march forth into your places.
Front-halfe-files double your reere to the right intire.
Front-halfe-files face about to the left, march forth into your places.
Front-halfe-files double your reere to the left intire.
Front-half-files face about to the right, march forth into your places.
Halfe-ranks of the right, double your left flank intire, advancing.
Halfe-ranks that doubled, face to the right, march forth and take your places.
Halfe-ranks of the left, double your right-flank intire, advancing.
Half-ranks that doubled, face to the left, march forth and take your places.
Halfe-ranks of the right, double your left-flanke by diviſion.
Halfe-ranks that doubled, face about to the right, march forth into your places.
Double your ranks to the right intire.
Ranks that doubled, face to the left, and march into your places.
Double your ranks to the left intire.
Ranks that doubled, face to the right, and march into your places.
Double your ranks by diviſion.
Ranks that doubled, face to the right and left inward, and march into your places.
Double your files to the right intire, advancing.
Files that doubled, face about to the left, march down into your places.
Double your files to the left intire, advancing.
Files that doubled, face about to the right, march down into your places.
Files, double your depth intire to the { right. / left. } * *Files that doubled, as you were.*

*Note that upon all motions of doublings, that they who are to double, before they move from their places, are to advance their Pikes, and ſhoulder their Muskets. When they have performed their doubling, they are to conforme to the poſture of thoſe whom they double, whether it bee Order, Advance, or ſhoulder. Note that all intire doublings are to be performed at order in both ranke and file. * Or it may be reduced by halfe-files (that now are) double your ranks forward to the contrary hand.*

Files

Files, double your depth to the right, every man falling behind his bringer-up.
Files that doubled, as you were.
Files, double your depth to the left, every man falling behind his bringer-up.
Files that doubled, as you were.

CHAP. XII.

Of Inverſion, and Converſion, and of doubling ranks.

THere is yet another *doubling* of the *depth*, which is called *Inverſion*. But becauſe ſome out of their ignorance make little or no difference betwixt *Inverſion* and *Converſion*, give me leave for the cleering of the doubt, to place *Converſion* and *Inverſion* together, that by their contrary *effects* the difference may be the more *perſpicuous*, to ſuch as ſhall be deſirous to know them. Yet before I either enter upon *Figure* or *Comand*, for *Inverſion* or *Converſion*, I hold it neceſſary to ſhew ſome of the *Figures* of thoſe *Doublings*, for which I have already given the words of *Command* and *Reducements*. And then next after them, I will place both the *words* of *Command*, and the *Figures* belonging to *Inverſion* and *Converſion*.

This *Figure* next following is a *doubling* of *Ranks* to the *Right*, where you may perceive how the *even ranks* are *inſerted* into the *odde ranks*: the *pricks denoting* the *places* they ſtood *in* before the *doubling* began, the *little line* or *ſtroke* drawn from the *pricks*, ſhewing the manner of the *doubling*: I thinke it would be needleſſe to make another *figure*, to ſhew the *doubling* of *ranks* to the left; for the meaneſt judgement may by this *figure* eaſily apprehend what the other would be.

Note that in the doubling of ranks, the even ranks are to double into the odde, beginning always to reckon from the firſt rank.

The Command is, *Ranks to the right double.*
The Direction is, *Every even Ranke move at three ſteps into the odde.*

Front.

	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
1	M	M	M	M	M	M	M	M	P	P	P	P	P	P	P	P	
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
3	M	M	M	M	M	M	M	M	P	P	P	P	P	P	P	P	
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
5	M	M	M	M	M	M	M	M	P	P	P	P	P	P	P	P	
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
7	M	M	M	M	M	M	M	M	P	P	P	P	P	P	P	P	
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	

Left Flank. Right Flanke.

Reere.

Ranks as you were, or, *Files to the left double.*

CHAP. XIII.

Doubling of Files.

IN *doubling* of *files* ever obſerve this *rule*, that the *even files* are to be *inſerted* into the *odde files*: alwayes beginning from the *hand named*: as for example, in this preſent *doubling* of *files*, the *left-hand-file ſtands faſt*, the ſecond *file doubleth* into it, the *fourth file* to the *third*, and ſo for the reſt. If your command be to *double* your *files* to the *right*, then contrariwiſe the *right-hand-file ſtands faſt*, the reſt of the *even files doubling* into the *odde*, accounting from the *right*, as before from the *left*. Thus much may ſuffice for the *doubling* of *files*: onely take this by way of admonition; that as in *doubling* of *ranks* any way, you are to obſerve your *right-hand-leader*: ſo in *doubling* of *files*, you are to obſerve your *file-leader*; ſo that as neer as poſſibly may be, you may either in *ranke* or *file* be altogether one *motion*. If you pleaſe further to obſerve with me, that this *doubling* is a *doubling* of *number*, and not of *place*, the *depth* of the *battell* not being thereby *extended*, for further ſatisfaction obſerve this *Figure*.

In doubling of files, note if the doubling bee to the left, as in this figure, then every man of the even files ſteps behind his left-hand-man, &c

The Command is, *Files to the left, double.*

The Direction is, *Every even file from the left, at three steps move into the odde.*

three steps, every even file doubling into the odd files, always beginning to account with the outmost file to the hand named; as I have formerly said.

Front.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	M	M	P	P	P	P	P	P	M	M						
	M	M	P	P	P	P			M	M						
2	M	M	P	P	P	P	P	P	M	M						
	M	M	P	P	P	P			M	M						
3	M	M	P	P	P	P	P	P	M	M						
	M	M	P	P	P	P			M	M						
4	M	M	P	P	P	P	P	P	M	M						
	M	M	P	P	P	P			M	M						
5	M	M	P	P	P	P	P	P	M	M						
	M	M	P	P	P	P			M	M						
6	M	M	P	P	P	P	P	P	M	M						
	M	M	P	P	P	P			M	M						
7	M	M	P	P	P	P	P	P	M	M						
	M	M	P	P	P	P			M	M						
8	M	M	P	P	P	P	P	P	M	M						
	M	M	P	P	P	P			M	M						

Left Flank. Right Flank.

Reere.

The Reducement, *Files, as you were:* or, *Ranks to the right, double.*

CHAP. XIV.

Of Doubling by Bringers-up.

In this doubling of ranks by bringers-up, as likewise in all other of like nature, they that are to move are to advance their pikes: But if the Commander please, it will be best for the ease of the musketteirs to be shouldred. And upon all doubling of ranks whatsoever, let them be sure to observe their right-hand men.

THe *Doubling* which next followeth, shall be a *doubling* by *Bringers-up*; of which sort, one *Figure* will be sufficient; which I hold most necessary to demonstrate the manner of *motion:* the *Command* and *Figure* followeth.

The Command is, *Bringers-up, double your Ranks forward to the right.*

The Direction is, *The last Rank passe forward to the right, and Rank even with the Front, the rest following successively.*

Front.

	2	6	7	3	2	6	7	3	4	8	5	1	4	8	5	1	
1	M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	1
2	M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	5
3	M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	8
4	M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	2 4
	8	M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	
5	M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	6 3
	7	M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	
6	M	M	M	M	P	P	P	P	P	P	P	P	M	M	M	M	7
	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Left Flank. Right Flank.

Reere.

The Reducement, *Bringers-up, Face-about to the left, March forth into your places.*

This *doubling of Ranks by Bringers-up*, differeth from the other *doubling of Ranks* which I first shewed, not onely in regard of the *distance* between the *Ranks*, and *quantity of ground*, but also in the *dignity* of the *Doublers*.

Fir

Firſt, it differeth in *place*, the former leaving *larger diſtance* between *rank* and *rank*, being *double that diſtance* they formerly *ſtood at*: this, to the contrary, continuing and preſerving the *diſtance* they firſt had between each *rank*, and leaving all that ground the *halfe-files formerly occupied*; as you may in part perceive by the *little pricks* at the bottom of the *Figure*.

It differeth alſo in *dignity*, bringing the *beſt* and *ſecond ſort of Souldiers* together into the *Front*: the other producing the *fifth rank in dignity to be doubled into the firſt, &c.* The manner of the *doubling* you may plainly perceive by the *Figure*; the *motion* of this *doubling*, and way to perform it, is as followeth: The *eighth*, or *laſt rank*, which are the *Bringers-up*, paſſe forwards *even in ranke*, through or between the *intervals*, to the *right* of them that ſtand before them, untill they come *even in rank* with the *Front*: the *ſeventh rank* following thoſe which *marched* from behind them, placing themſelves in the *ſecond ranke*; the *ſixth* in the *third*; the *fifth ranke*, or *halfe-file*, in the *fourth* or *reer* of the *front-halfe-file*. This *doubling* maketh a very able *front*, in bringing all the beſt *Souldiers* together. And although it hath *diminiſhed* the *number* in regard of the *depth*, yet it hath *doubled* the *number* in the *length*. This *doubling* is in *quantity* of *number*, not of *ground*. When you *reduce* them into their *places*, remember this, that the *rank* which laſt took his *place* in the execution of this *motion*, muſt firſt *march* into his *place* in the way of *reducement*: for as they are led-on by their *bringers-up*, contrariwiſe they are led-off by their *half-file-leaders*.

This doubling is a great ſtrengthning to the Front.

In the *doubling* of the *Front* to the *left* by *Bringers-up*, it is the ſame; onely differing in the hand: Wherefore let this ſuffice for *doublings* by *Bringers-up*.

CHAP. XV.

Doublings of files outward and inward.

THe next *doubling* is a *doubling of files outward*; which works the ſame effect as to *double files* to the *right and left*: for the *right flank* is to *double to the right*, the *left flank* to the *left*. As you may plainly perceive by the following *Figure*.

The Command is, *Files, to the right and left double outward.*

The Direction is, *The out-moſt files of each flank ſtand, the even files from each flank double into the odde.*

Front

	1	2	3	4	5	6	7	8	8	7	6	5	4	3	2	1
1	M	/	M	/	P	/	P	/	\	P	\	P	\	M	\	M
	M		M		P		P			P		P		M		M
2	M	/	M	/	P	/	P	/	\	P	\	P	\	M	\	M
	M		M		P		P			P		P		M		M
3	M	/	M	/	P	/	P	/	\	P	\	P	\	M	\	M
	M		M		P		P			P		P		M		M
4	M	/	M	/	P	/	P	/	\	P	\	P	\	M	\	M
	M		M		P		P			P		P		M		M
5	M	/	M	/	P	/	P	/	\	P	\	P	\	M	\	M
	M		M		P		P			P		P		M		M
6	M	/	M	/	P	/	P	/	\	P	\	P	\	M	\	M
	M		M		P		P			P		P		M		M
7	M	/	M	/	P	/	P	/	\	P	\	P	\	M	\	M
	M		M		P		P			P		P		M		M
8	M	/	M	/	P	/	P	/	\	P	\	P	\	M	\	M
	M		M		P		P			P		P		M		M

Left Flank. Right Flank.

Reere.

Files as you were.

This *doubling* of *files* to the *right* and *left outward*, ſtrengthneth *both* the *flanks* at *once*, by *doubling* their *numbers* in *depth*: But it *weakeneth* the *inward part*, where it taketh *two files* clean away leaving a *large intervale* in the *midſt*. Some ſay, it is good when a *Commander* will grace any, to bring them through the *center* or *midſt* of the *Battalia*. But you muſt note, if you have an odde *file* you cannot ſo punctually performe it, as when the *number* of your *files* be *even*. The manner of the *doubling* you may perceive by the *figure*, the *motion* by the *little lines* drawne from the pricks, the performance is as followeth.

The *outmoſt file* of each *flank ſtands*, the ſecond *file double into them*; the third *file* from each *flank ſtands*, the fourth *file double* into the third, the fixth into the fifth, and ſo likewiſe for the reſt.

Doubling files to the right and left inwards.

If you would *double files* to the right and *left inward*, it is to be done the contrary way; for whereas in this *figure* of doubling laſt performed, the *outmoſt files* ſtand, the other *doubling outward* into them: contrariwiſe the two *inmoſt files* ſhould ſtand, the reſt *doubling* to them *inward*: and whereas in this there is a *larger diſtance* in the *midſt*, then is in any other part, the other part *contra* would be *cloſeſt* in that part. Some men doe not approve of either of theſe *doublings*. I leave every man to his owne choice. The *practice* tends to *perfection*, and he that can doe much may doe leſſe when he liſteth.

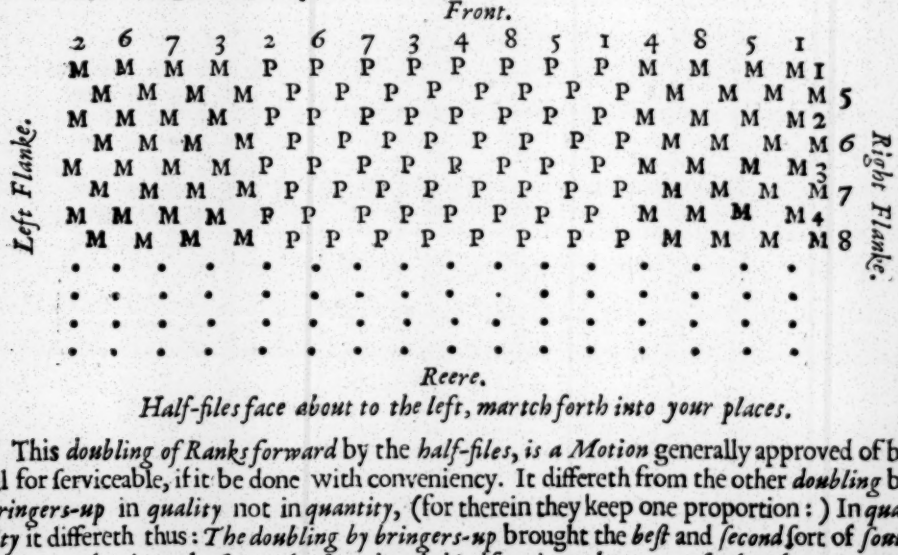
CHAP. XVI.

Of doubling by halfe-files.

THe next doubling is a *doubling* by *halfe-files*, whereby the *length* of the *battell* is extended to *double* the former proportion of *number*, the *depth* being extenuated both in *number* and *place*. This *Figure* will demonſtrate unto you the manner of the *motion*, which is as followeth.

The Command is, *Halfe-files, double your Ranks forward to the right.*

The Direction is, *Half-file-leaders paſſe forwards to the right into the front, the reſt of the ranks following ſucceſſively.*



Half-files face about to the left, march forth into your places.

Doubling by half-file by the Greeks called parembole, or inſertion Tact. Æli. & c.

This *doubling of Ranks forward* by the *half-files*, *is a Motion* generally approved of by all for ſerviceable, if it be done with conveniency. It differeth from the other *doubling* by *bringers-up* in *quality* not in *quantity*, (for therein they keep one proportion:) In *quality* it differeth thus: *The doubling by bringers-up* brought the *beſt* and *ſecond* ſort of *ſouldiers* together into the *front*, the *fourth* and *third* ſort into the *reere*: ſo that the *reere* was worſe then the *front* $\frac{+}{1}$: this doubling by *halfe-files* brings the *beſt* and the *third* toge-

ogether into the *front*, and leaves the *second* and *fourth* in the *reere*: ſo that the *front* is ade more able then the *reere* by ⅓. It differeth likewiſe in *Motion*; For whereas in the o-her doubling by *bringers-up*, the *Motion* was begun by the laſt *ranke*, every *Ranke* fol-owing the *ranke* which came from behind them: this contrariwiſe is directly led forth by he *fifth ranke* from the *front* (if they be but *eight deep*) and ſo is executed more ſurely and uddenly; the *fifth rank* paſſing into the *firſt*; the *ſixth rank* into the *ſecond*; the *ſeventh* nto the *third*, and ſo for the reſt. For the **reducement*, when they are commanded to *face a-out to the left, and march forth into their places*, then as the motion was led on by the *alf-file-leaders*, ſo in the *reducement* they are led off by the *Bringers-up*: *Doubling* of *alf-files* to the *left* produceth the ſame effect, only the contrary hand.

Doublirgly half-files makes the front to precede the reere by one third.

**In the reducement of this doubling the bringers-up are the leaders of the motion.*

CHAP. XVII.

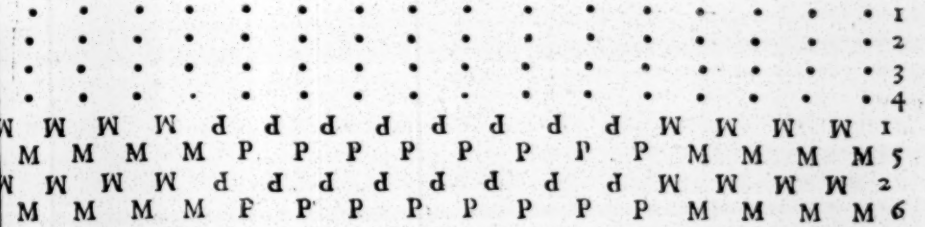
Of doubling the Reere by front-half-files.

THe *doubling* of the *Reere* by *Front-half-files* is differing from the *doubling* laſt ſhewn, more in *manner* then *matter*; both concurring in ſubſtance, although differing in cir-umſtance. To ſay more of it were more then needed, only peruſe the *figure*, which preſents ſelfe unto you (as it is in *Motion.*)

The Comm and is, *Front-half-files, double your reere to the right.*

The Direction is, *Front-half-files, face to the reer, and march down even to the laſt rank.*

Firſt Front.



Reere.

Front-half-files, face about to the left, march forth into your places.

This *doubling* of the *Reere*, by the *front-halfe-files*, is to be performed after this manner. he *command* being firſt given) the *front-half-files face about to the left* (the *pikes* being all *anced*, the *muſquets* all either *poyſed* or *ſhouldered*) and ſo being *led* by the *halfe-file-aders* to the *reer*, which are thoſe that hold the fourth place of *honour*, they *march directly wards* to the *left* of the other part of the *body*, which ſtood *faced* in *oppoſition*, untill the *aders* of the *doubling* have *ranked* even in *rank* with the *bringers-up*, the reſt *ranking e-* with the other *ſtanding ranks*, according to their *places*: If it be for *ſervice* that this *bling* is uſed, then the whole *Body* is to *face about* to the *reere*, being the *part* to be *dou-d*: If onely for *exerciſe*, then the *Commander* may (if he pleaſe) keep his *place*, and the *bling* being performed, *face* the *whole body* to the *Leader*, and *command* for the *reduce-t*; *Files to the right, double entire advancing*; which *reduceth* each man to his firſt *place*.

The Rank which holds the fourth place of honour are the leaders of the motion;

CHAP. XVIII.

Of doubling the Reere by Counter-march.

HEre is another manner of doubling of the reer, by the front-half-files, contrary to that ſhewn in the precedent chapter, which is done by the way of the *Lacedemon-counter-*

march,

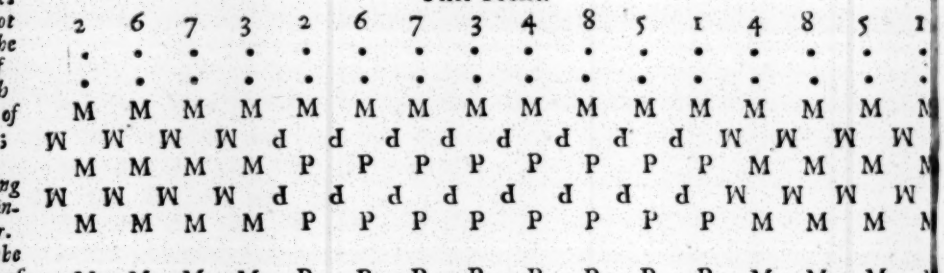
march, which ſome would rank amongſt the *Counter-marches*; becauſe (ſay they) the *motion* is a *Counter-march*: But the *act intended*, or thing wrought, is a *doubling*; and if it were to have the denomination of a *Counter-march*, then it ought not to mix with any other part of the *Body*; onely to *counter-march the front into the midſt*, and there to ſtand without paſſing forward to the *Reere*, (which makes it a *doubling*) and then it might be accounted for a * *part-counter-march*: But as it is here commanded, and performed, it is *doubling*. Obſerve the Command, and Figure following.

* *A part-counter-march is when one moity or part of the Body counter-marches thereby not altering the number of the length or depth of the figure; but onely transferring one part into another. It is at the diſcretion of the Commander to face the Company which way he pleaſeth, either for motion, or reducement of any motion formerly performed.*

The Command is, *Front-halfe-files, counter-march to the left, and double the Reere.*

The Direction is, *Reere-halfe-files, face to the Reere and ſtand, the reſt counter-march to the left and loſe ground.*

First Front.



Reere.

Front-halfe-files, face-about to the left, march forth into your places.

This *doubling* of the *Reere* by *counter-march*, produceth the ſame effect to the *Reere* *doubling the Front* by *Bringers-up* doth unto the *Front*: The *Counter-march* by which it is performed, is *a Counter-march of loſſe of ground*; we will ſpeak more of it among the *Counter-martches*. The Command to reduce it is, (if the Commander ſtand at the head of that part that is doubled) *Front-halfe-files, face-about to the left, march forth into your places*. If hee keep his firſt ſtand, having faced them to him, then, *Front-halfe-files, march forth into your places*. To double the *Reere* to the *left* by *Counter-march*, is the ſame differing onely in the hand. I will next ſhew a *doubling* of the *left-flank* by way of *Counter-march*.

CHAP. XIX.

Of doubling Flanks by way of Counter-march.

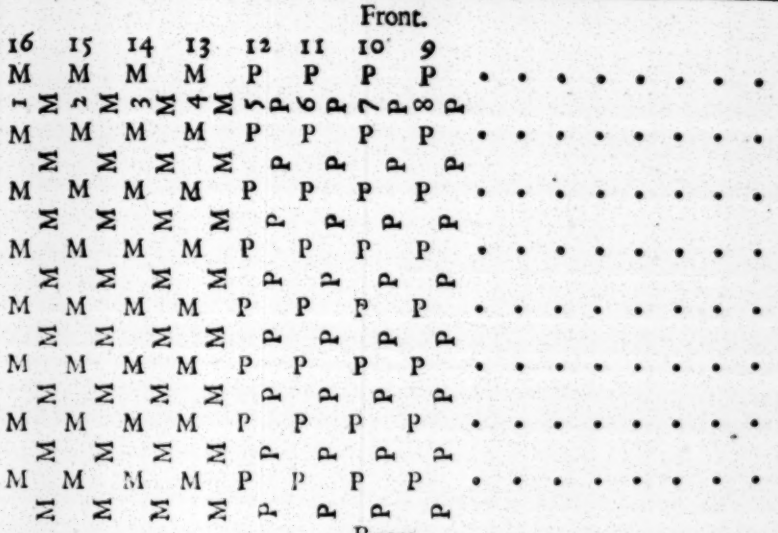
HAlfe-*Ranks* (or *Flanks*) are then ſaid to be *doubled, when the depth of your Battle is encreaſed to double their former proportion of Number or Place*, (or both;) which may be done divers wayes. But this Chapter and Figure is onely to demonſtrate unto you *the doubling of the Left-flank by way of Counter-march*. The Figure followeth, as the *doubling* is in *motion*.

The Command is, *Halfe-ranks to the right, by Counter-march double your Left flanke.*

The Direction is, *Face to the right, and counter-march to loſe ground.*

Fr

Front.



Reere.

Halfe-ranks that doubled, face to the right, Martch forth into your places.

This *doubling of halfe-ranks by counter-martch* is a *doubling of number*, not of *place*; for the *depth* ſtill retaines the ſame proportion in *quantity of ground*, onely augmented by one man, the *length of your Battalia* being diminiſhed both in *number and place*; the *right-flank being wholly inſerted into the left-flank*: as you may perceive by the Figure. The motion is to be performed on this manner: *The halfe-ranks of the right face to the right, and then even in rank together counter-march between the Intervales*, untill the out-moſt *file* to the *right*, which is marked with the figure 1, be come into the out-moſt *file* of the *left-flanke*, which is marked with the number 16; the ſecond into the fifteenth; the third into the fourteenth; the fourth into the thirteenth; and the reſt in like manner. The uſe of this *doubling* is, to ſtrengthen one of the *flanks*, by bringing more hands to doe preſent execution, the other *flank* being in more ſurety. The way for the reducement of this motion is after this manner: *The halfe-ranks that doubled being faced to the right*, then they which were the laſt in taking their *places* in the *motion*, now are the firſt which take their places in the *reducement*, orderly *martching in rank together*, untill they come to their places; then *facing* to their *Leader* they become *files* againe. The *left-flank* may in like manner *double the right by counter-martch*; the difference is this: the *right-flank ſtands*, the *left-flank is inſerted into the right*, as before the *right was into the left*. To ſhew another *Figure* for it would be altogether needleſſe.

The uſe of this doubling.

Obſerve the manner of the reducement.

CHAP. XX.

Doubling halfe-files to the right entire, to accommodate the doubling of halfe-ranks.

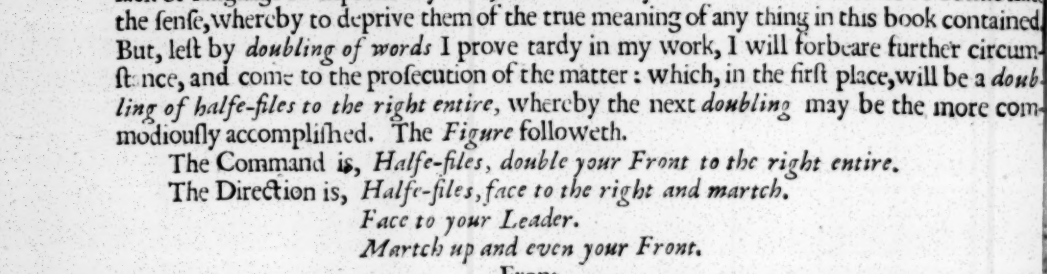
Should now come to ſhew another manner of *doubling of flanks*, by *inſerting the one flank* into the other, a different way from that laſt ſhewn: but if I ſhould performe it as the Body ſtands in the ordinary *Square*, *flanked with Muſquettiers*, then it would produce a mixture of Armes. To avoid which, before you enter upon this *doubling* of *paſſing in, through*, or *between your halfe-ranks*, cauſe your *halfe-files to double the Front to the right entire*; which being performed, you may then proceed to the *doubling* of your *flanks* any way, without mixture of Armes. If I ſhould have ſhewen this motion with

Pikes or *Muſquettiers* alone, this firſt *doubling of halfe-files entire* might have been ſpared; but I deſire not to leave any thing obſcure or difficult, but to render it as eaſie and apparent as I may, to the capacity of the meaneſt Reader: And if any place in this ſmall Treatiſe of mine ſhall ſeeme ambiguous, I ſhall intreat the courteous to impute it to my lack of language to expreſſe my ſelfe, rather than any will in mee to conceale or obnubilate the ſenſe, whereby to deprive them of the true meaning of any thing in this book contained. But, leſt by *doubling of words* I prove tardy in my work, I will forbeare further circumſtance, and come to the proſecution of the matter: which, in the firſt place, will be a *doubling of halfe-files to the right entire*, whereby the next *doubling* may be the more commodiouſly accompliſhed. The *Figure* followeth.

The Command is, *Halfe-files, double your Front to the right entire.*

The Direction is, *Halfe-files, face to the right and martch.*
Face to your Leader.
Martch up and even your Front.

Front.



Reere.

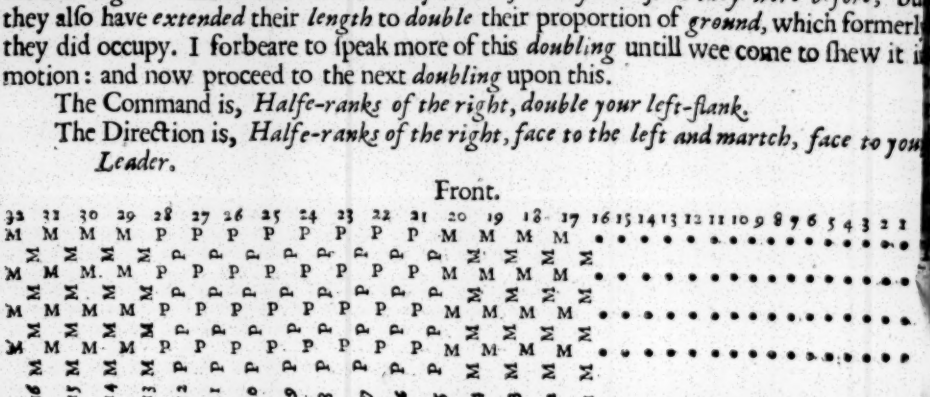
This *doubling of halfe-files to the right entire*, I have fully expreſt in the *Figure*, as the Body ſtands, the motion being ended; becauſe we are to adde another *doubling* before we reduce them. This Figure next following will be beſt ſhewn in the motion (or action) not fully performed: that thereby the manner may be the more eaſily diſcerned. But by the way obſerve, that this *doubling of halfe-files, is a doubling both of number and place* for the *length* of the *Battalia* is not only *double ſo many a breſt as they were before*, but they alſo have *extended* their *length* to *double* their proportion of *ground*, which formerly they did occupy. I forbeare to ſpeak more of this *doubling* untill wee come to ſhew it in motion: and now proceed to the next *doubling* upon this.

All entire Doublings are Doublings both of number and place.

The Command is, *Halfe-ranks of the right, double your left-flank.*

The Direction is, *Halfe-ranks of the right, face to the left and martch, face to your Leader.*

Front.



Reere.

Halfe-ranks that doubled, face to the right, martch forth into your places.

This *doubling* of *halfe-ranks* is a more ſpeedy and ſure *doubling* then the *doubling* of *halfe-ranks* by *counter-marcht*: notwithſtanding, it is moſt commonly uſed when the Body conſiſts but of one ſort of Armes, being either all *Muſquettiers* or all *Pikes*. Nevertheleſſe, becauſe in my Figures I have as well *Muſquettiers* as *Pikes*, I have made uſe of a *doubling by halfe-files entire*, and from that have *doubled my left-flank*, ſo to prevent the *mixture* of *Armes*. However, [a] *mixture* of *Armes* upon ſome occaſion may be *neceſſary*. The manner to performe the motion is this, *The left-flank ſtands, the halfe-ranks of the right face to the left*, and then the *inmoſt file of the right-flank* (all the files of the right-flank being by this facing become ranks) *is the leader of this motion*, marching forth directly to their *left-hands, between the intervales of the ranks of the left-flank, untill that the ſixteenth file, which now is become a rank, hath placed it ſelfe orderly in the two and thirtieth file*, (which is the out-moſt file of the left-flank;) *the fifteenth in the one and thirtieth, the fourteenth in the thirtieth, the thirteenth in the nine and twentieth, and ſo likewiſe of all the reſt*. The places may be perceived by the Figure. The *doubling* is of *number*, and not of *place*. For [b] reducement to both theſe *doublings*, firſt cauſe the *halfe-ranks which laſt doubled*, to face to the *right*, and ſo to *marcht into their places*: They that *laſt* took their *places* in the *motion*, are the *firſt* that take their *places* in the *reducement*. The *doubling* of *halfe-ranks* being thus reduced; next for the reducing of the [c] *halfe-files*, (which were *doubled* before, for the accommodating of the *doubling of halfe-ranks*) command the *halfe-files to face about to the left*, and *to marcht forth into their places*: Wherewith I will conclude theſe ſorts of *Doublings*, which require *open Order in rank and file*, and come next to ſhew *intire doublings*, which claime a cloſer diſtance for their true performance. And therefore, conceive them cloſed to their [d] *Order* both in *ranke* and *file*.

[a] *Mixture of Armes at ſome time may be neceſſary.*

[b] *The reducements to both theſe doublings; and firſt to reduce the doubling of the Left-flank.*

[c] *The doubling of halfe-files to the right intire reduced.*

[d] *Order both in rank and file the true diſtance required for intire doublings.*

CHAP. XXI.

The difference between intire and diviſionall Doublings, and of doubling halfe-files intire.

HAving cloſed our Souldiers to their due diſtance, I will next proceed to ſhew *doublings intire*. But me thinks I heare ſome already enquiring, What is meant by *intire doublings?* and therefore, without offence to the curious, give me leave to be ſo curteous to tell them, That all *doublings* are either *intire* or *diviſionall*. *Intire doublings* being theſe, or ſuch like, as when the *files* or *halfe-files*, *ranks* or *halfe-ranks*, (according as the Command ſhall be given) doe *marcht forth joyntly together, without diviſion or diſſipation, to double the part commanded*. *Particle* and *diviſionall doublings* being ſuch as I have formerly ſhewen: as when the *files* or *halfe-files*, *ranks* or *halfe-ranks*, are *diſ-ranked* and *divided* into more *parts* or *places* than one. This may ſerve for way of diſtinction: I will now ſhew *intire doublings*, as they are in action; and firſt begin with *doubling halfe-files*. The Figure followeth.

What intire Doublings are.

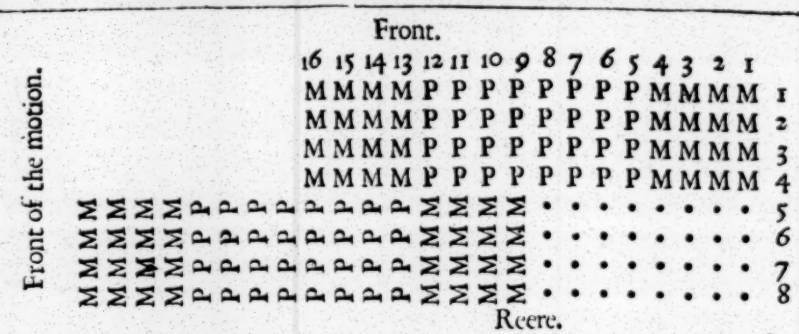
What is meant by Particle and Diviſionall Doublings.

The Command is,

Halfe-files, double your front to the left intire.

The Direction is,

Halfe-files, face to the left and Marcht.
Face to your Leader.
Marcht up and even your front.



Halfe-files, face-about to the right, martch forth into your places.

This *doubling of halfe-files intire*, hath been held a better *doubling* then either the ordinary *doubling* of *ranks*, or the uſuall way of *doubling* by *halfe-files* or *Bringers-up*; ſome of the cauſes are theſe: Firſt, it makes no diſturbance to the other part of the *Battalia* but that it may either be executed in the time of *motion*, *exerciſe*, or *skirmiſh*. Secondly it appeares another *ſolid Body*, to the great diſheartening of any enemy. Thirdly, it is very apt for *over-fronting*, being a *doubling* both of *number* and *place*. That it hath been uſed by *Antiquity*, take one example out of *Polybius*; Philopemen *the* Achaian *General having ranged his Battalias in forme of* Plagiophalanx, *the* Lacedemonian Machanidas *being to confront him, martcht up directly oppoſite to his right wing, in form of a Herſe (called* Orthophalanx) *but being come within convenient diſtance, hee ſuddenly cauſed the Reere-halfe-files to double the front to the right intire, thereby equallizing the leading wing of the* Achaians. The manner or way to performe the Motion is this; *The halfe-files face to the left, and martch till they are quite cleare of that part of the Body which ſtand, then they face to the Leader, and ſo martch up, untill they are become even in rank with thoſe which ſtand upon the right-flank:* and then the Figure will be perfect. For the reducement, the word of command is, *Halfe-files, face-about to the right, martch forth into your places*: Having faced-about, they martch ſtraight forth, untill they be clear of the *front halfe-files*; then they *face to the left*, and *martch* ſtraight forth, untill every man hath his right place, and then face right after their Leaders. The *doubling* of *halfe-files to the right intire*, is performed after the ſame manner, onely differing in the hand.

Doubling by halfe-files intire, a ſerviceable doubling.

Polybius lib. 1 p. 63 1. B. as alſo *Ælian* in his Tacticks, the notes of the 32. Chap.

The direction for this doubling of halfe-files.

The word of Command and reducement of this doubling.

CHAP. XXII.

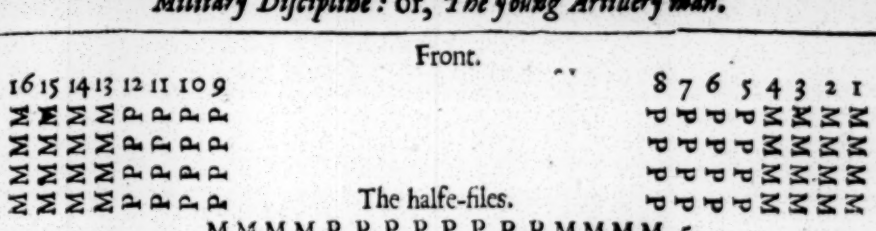
Of doubling the Front inward intire.

DOubling of the *Front inward intire*, hath been a Doubling as uſefull as ancient: notwithſtanding, moſt commonly uſed by great Bodies; as when one *Regiment, Diviſion*, or *Maniple, moveth forward between two others*, thereby *ſeconding* or *relieving them*: whereby the *Front* of all the *three Diviſions* become *ranged* in an *even line*; but I have only taken upon me to ſhew the motion in a private Company. The Figure whereof followeth, as it is in the execution.

The Command is, *Halfe-files, double your Front inward intire.*

The Direction is, *Front-halfe-files, face to the right and left and martch, Stand, and face to your Leader. Reere-halfe-files, martch up and even your front.*

Fron



Halfe-files, face-about and martch: Front-halfe-files, cloſe your Diviſion: Face all to your Leader.

It hath been the cuſtome amongſt ancient Souldiers and great Commanders, that in the matter of *Exerciſe* they ſhew ſome things which are moſt apt for a *private Company*; ſome for a *Regiment*, other ſome moſt uſefull for complete *Armies*: ſo in like manner it muſt be the diſcretion of every Reader, (whether hee read for *apprehenſion* or *reprehenſion*) to ſuit and fit each Motion to his true end and purpoſe; and with the wiſe man, *rather read twice, than judge once*: and then perhaps, when the intent of the Author is *perceived*, his opinions may be *received*. Yet, what need I, or any other Apologize ought in the behalfe of this *Form*, or any other ſuch like; ſith they are but the expreſſions of the *various Figures*, which proceed of the words of Command, uſed (almoſt) by every ordinary *Exerciſer of a Foot-Company?* Nevertheleſſe, if *Æſops* long-ear'd beaſt paſſing by ſhould peep into this *Druggiſts ſhop*, and quarrell with the Compounds, I ſhall not ſtudy for a further anſwer, then that, *The excellent and skilfull Phyſician can convert that into an antidote, which the unlearned foole will make his poyſon.* But leſt I be tax'd for digreſſion, the Motion of this Doubling is thus performed; *The halfe-files of the Front* face to the Right and Left, and martch till they have left a diſtance between them ſufficient to receive the *halfe-files* of the *Reere*, then *ſtand*, and *face to their Leader*. That done, the *halfe-files martch up and even their Front*. For the reducement of this Figure, there are as for all the reſt) divers wayes. But becauſe that it is neceſſary to ſhew one, let the *halfe-files* face-about to the *Reere*, and martch untill they are cleare of the *Front-halfe-files*, then cauſe them to *ſtand*, and *face to their Leader*: that being performed, command the *Front-halfe-files* to *cloſe their diviſions*, and they are rightly reduced as at firſt.

The manner or way how this doubling ought to be performed.

The Reducement.

CHAP. XXIII.

Of Halfe-files doubling the Front by diviſion.

THis Doubling hath beene very well approved of by Count *Mansfield*, Sir *Thomas Kelly*, Captaine *Bingham*, and divers other moderne *Souldiers* of good eſteeme, who referre theſe ſorts of Doublings before any other; becauſe theſe Doublings may be uſed time of fight, without diſturbance to the other part of the Battell. The Figure ſtands as it is in motion.

The Command is, *Halfe-files, double your front by diviſion.*

The Direction is, *Halfe-files, face to the right and left, and martch; Stand; Face to your Leader; Martch up and even your front.*

Front.

16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

M M M M P P P P P P P P M M M M 1
M M M M P P P P P P P P M M M M 2
Half-files of the left-flanke. M M M M P P P P P P P P M M M M 3 Half-files of the right-flanke.
M M M M P P P P P P P P M M M M 4
M M M M P P P P • • • • • • • • P P P P M M M M 5
M M M M P P P P • • • • • • • • P P P P M M M M 6
M M M M P P P P • • • • • • • • P P P P M M M M 7
M M M M P P P P • • • • • • • • P P P P M M M M 8

Reere.

Half-files, face-about inward. Martch forth into your places

The manner how this doubling ought to be performed. The reducement.

The way to performe this motion, is as followeth: the *half-files* are to *face* to the *right* and *left*, and to martch untill they are cleere of the Reere-part of the *front-division*, then they face to their Leader, and martch up, untill they be come even in rank with the *front*, and so ſtand: which perfects this *doubling*. The way to reduce them is as followeth. The *half-files* are to *face-about* to the *Reere*, and to martch forth-right, untill they are cleare of the *front-halfe-files*, and then they are to *face* to the *right* and *left* inward; and ſo to martch and cloſe their *diviſion*: then being *faced* to their Leader, they are *reduced* as at firſt.

CHAP. XXIV.

Of doubling the Reere by diviſion.

THis next doubling ſhall be a *doubling of the Reere by the front-halfe-files*, which will work the ſame effect to the *Reere*, as the laſt *doubling* by *diviſion* did to the *front*. It may be uſefull in the paſſing of a River, when the enemy chargeth or purſueth in the Reere. The *front diviſion either opening*, as you may perceive by the figure (next following) and ſuffering the *Reere-halfe-files* to paſſe through them, they *maintaining the skirmiſh*, untill the other have attained the further banke of the river; or elſe the *Front-halfe-files* being *opened* to the *right* and *left*, and *faced* upon the *Enemy*, *Martch* gallantly up, and *receive* the *Charge*, whileſt the others provide for themſelves. This motion may alſo be uſefull, when you have gained ſome place of advantage, for then by this *doubling of the Reere*, your Battaile will be both *lengthned* and *ſtrengthened*. And ſo by the ſudden bringing of theſe ſupplies into the *Reere*, you may not onely relieve your own, but happily *over-front* your *enemy*. The figure followeth.

The Motion advantagious for the ſtrengthening of the Reere.

The Command is, *Front-halfe-files, double your Reere by diviſion.*

The Direction is, *Front-halfe-files, Face to the right and left, and martch. When they are clear of the ſtanding part of the Body, face to the reere and move down even with the reere.*

This was the Front before the Motion begun.

M M M M P P P P . . . . . P P P P M M M M 1
M M M M P P P P . . . . . P P P P M M M M 2
M M M M P P P P . . . . . P P P P M M M M 3
M M M M P P P P . . . . . P P P P M M M M 4
M M M M P P P P P P P P P P P P M M M M 5
M M M M P P P P P P P P P P P P M M M M 6
M M M M P P P P P P P P P P P P M M M M 7
M M M M P P P P P P P P P P P P M M M M 8

Reere.

Front-halfe-files, face-about to the right and left inward, Martch forth into your places

The motion may be thus performed: The *Front-halfe-files face* to the *right* and *left*, and *martch* untill they are cleere of the other *half-files* of the *Reer*; Then they *face* to the *Reer*, and *martch* on untill they have attained to be even in *ranke* with them, whom they had command to *double*; which perfects the *doubling*. The way to *reduce* them, is as followeth: If you keepe your place of the firſt Front, then let your *Front-halfe-files face-about*, (according to the former directions) and *Martch untill they are cleer of the reer-half-files*, which ſtand; Then *face* to the *right* and *left inward*, and cloſe their *Diviſions*; So being faced all to their leader, they are reduced. Sundry and divers wayes there are for *reducement*, both of this and moſt other *figures*. Nevertheleſſe I conceive, if I give one *reducement* to each *figure*, it may ſuffice to thoſe that know little; As for ſuch which know better, they know more waies to the wood then one: And ſurely, ſhould I enlarge my ſelfe but half ſo much as I might, (and indeed in ſome things, no more then were needfull) I ſhould then bring my *Volume* into too great a *bulke*; and by the *price* hinder ſome of the profit: But I am willingly ſilent in many things, to the end, that others may thereby be the better encouraged by my weakneſſes, to take notice of their owne *worths*, which may induce them to put pen to paper, and thereby produce ſome *worthy worke*, which may tend to their credits, and their Countries good.

Inſtructions how to performe this doubling. The Reducement.

The curious may find many wayes of reducement.

CHAP. XXV.

Of doubling the Reere intire, by the Front-halfe-files.

THis next *doubling* ſhall be a *doubling* of the *reere* to the *right intire*, by the *front-halfe-files*: which I intend not fully to demonſtrate, but to deliver the *figure*, as it will offer ſelfe in the *Motion*. And I conceive it will not be amiſſe (for the benefit of the *Learner*) to render ſome *formes* in their moving *poſture*, rather then to ſhew them all as they could appeare, the *motion* being perfected; for the way of the *working*, gives a great deale more light to the *Learner*, then to ſhew the thing abſolutely wrought. Neither would I give any thinke, although I ſhew theſe varieties of *doublings*, and acknowledge them to be of ſingular good uſe for the extention of the *length* or *depth* of any Battaile; but that the wiſe conduct and skill of the Commander muſt ſo order them, that the *extending* of the *length*, doe not too much weaken the *depth*; nor that the *ſtrengthening* of the *depth*, be not too *great* a *weakning* to the *front* or *length* of your Battaile. I might give examples how divers great Commanders, either by good fore-ſight, or ill over-ſight, have runned to *themſelves* and their Countries, *honour* and *victory*, or *loſſe* and *ſlavery*. But Writers have been very plentifull in examples of this nature, which makes me forbeare: For my intent is not to write a Hiſtory of the actions of others, but rather to ſhew to ſuch as are not ſo skilfull, the *Poſtures*, *Motions*, and ſome few *formes* or *figures* of *Battell*, with their ſeverall *Reducements*, ; *thereby to indeere ſuch as have generous and publique ſpirits, to endeavour the attainement of this Military skill.* The *figure* of this preſent *doubling* followeth.

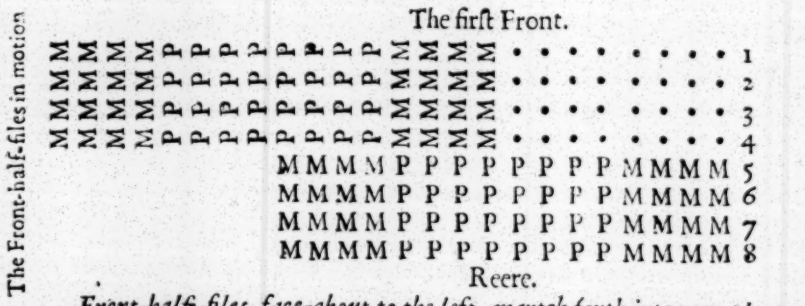
The

The Command is,

Front-halfe-files, double your Reere to the Right intire.

The Direction is,

Front-halfe-files, face to the left and martch: Stand. and face all to the Reere of the Battell. Martch, and rank even with the Reere.



Front-halfe-files, face-about to the left, martch forth into your places.

Note the Motion. The way to performe this Motion (or Doubling) is after this manner: The *Front-halfe-files* face to the Left, and martch untill they are cleare of the *Reere-halfe-files:* then face againe to the Left, (which is the *Reere*) and martch out-right untill they *rank* even with the laſt *rank* of the *Reere-diviſion*; which gives concluſion to the Doubling.

The Reducement. For the reducement; Let your *Front-halfe-files* face-about to the Left, and martch right forth untill they are cleare of the *Reere-halfe-files:* then face them to the Right, and when them martch into their places. That done, if the *Commander* goe to his *firſt front*, and face them all to him, they are reduced as at firſt. To *double* the *Reere* to the *left hand* may be done after the ſame manner; onely differing in the hand.

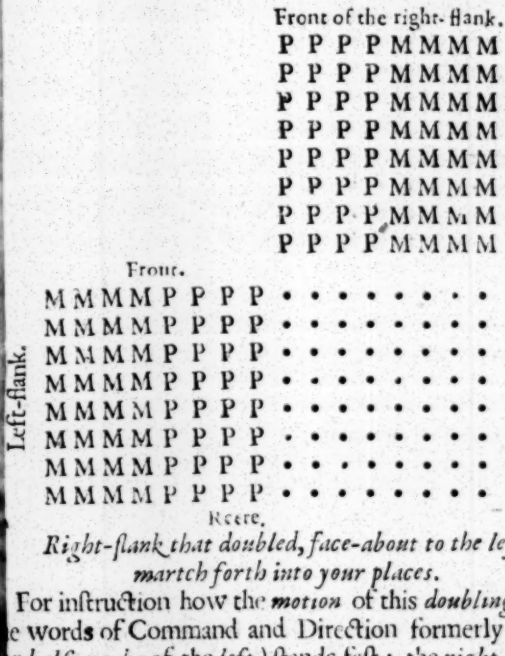
CHAP. XXVI.

Of doublings by flanks, or halfe-ranks intire.

HAving ſhewed the *Particle-Doublings*, and the *doublings* of *Front* and *Reere intire* by *diviſion*; I will next ſhew the *doublings* of *flanks* after the ſame manner. And will firſt begin with a *doubling* of the *left-flank*, by advancing the *right-flank*, and placing it before the leaders of the *left-flank:* which is a *doubling* both of Number and Place, and may ſerve to ſingular good uſe, for the *ſtrengthening* of any *flank* where it may be needfull; for it makes the *Battaile defenſible* on every part. The Figure, as it is in motion, followeth.

A doubling of Number and Place.

The Command is, *Double your left-flank intire, advancing.*
The Direction is, *Right-flank, Martch, Stand, Face to the left, and martch even with the left-flank; Face all to your Leader.*



Right-flank that doubled, face-about to the left, martch forth into your places.

If you would have your *Muſquettiers* to *double even* with the *Muſquettiers* of the *contrary flank*, then it is no more but thus: Cauſe the *halfe-ranks* of the *right-flank* to *martch* forth-right, (as you may perceive by the Figure) untill the *Reere-rank* of the *right-flank* be *advanced* about *three foot* before the *front* of the *left-flank*; then cauſe that *flank* ſo *advanced*, to *counter-martch* their *Ranks* to the *right*; and then all your *Muſquettiers* will be together on the *left-flank*: the *Pikes* likewiſe by themſelves on the *right-flank*. If this be performed, then the *Reducement* muſt be anſwerable after the ſame manner.

This Reducement conceives the whole Body faced to the left-flank. If they face to the proper front, then, Right-flank that doubled, face to the right, martch forth into your places. Or, Halfe-files that now are, double your front to the left intire. Either of theſe will do it.

For inſtruction how the *motion* of this *doubling* ought to be performed, (according to e words of Command and Direction formerly given) is as followeth. The *left-flank* or *halfe-ranks* of the *left*) ſtands faſt: the *right-flank*, both *Muſquettiers* and *Pikes*, artch forth-right, untill the *Reere* of the *right-flank* be advanced before the *Front* of the *ft-flank*; as aforeſaid. Then face them to the *left*, and cauſe them to martch untill the *kes* are *even* in *rank* with the *Muſquettiers*; then face to the *Leader*, and the *doubling* perfect.

For the *Reducement*, let the *right-flank* that *doubled face to the right*, and *martch* untill ey are cleare of the *left-flank* (or ſtanding part of the Battalia:) Then cauſe them to *face* aine to the *right*, and *martch* ſtraight down into their places: Laſtly, being *faced* to the ft *front*, they are rightly *reduced*. The *right-flank* may alſo face-about, and *double* the *ft-flank* towards the *Reere*; both (for manner of Figure) work one and the ſame effect, ffering onely in circumſtance; the one being a *doubling advancing forwards before the ront*, the other a *doubling of the depth towards the Reere*. The *left-flank* may *double* the *ght-flank intire*, either to the *Front* or *Reere*; but by this that hath already been ſhewen e others may be underſtood: wherefore I ſpare the Figures.

The Reducement.

CHAP. XXVII.

Of doubling Flanks by Diviſion.

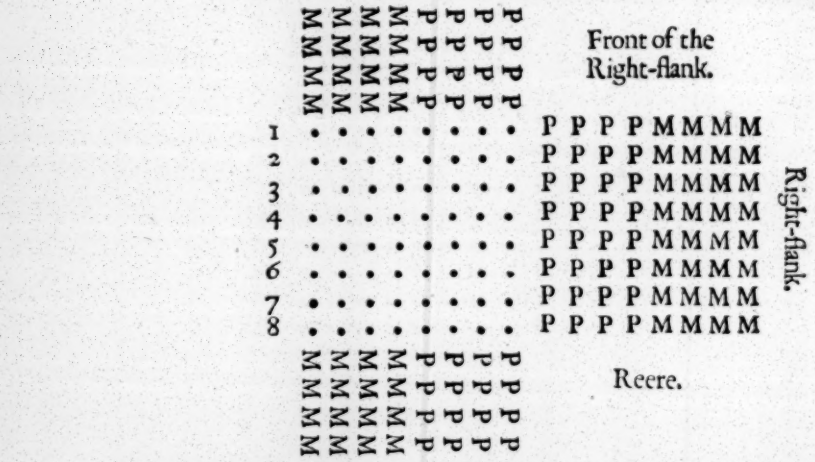
THis next *doubling* is a *doubling* of *Flanks by diviſion*: and without queſtion, a ſerviceable *doubling*, and very uſefull for ſome occaſions. For, if you note the Figure, and nceive rightly what it will produce, (the *Motion* being ended) it makes a ſtrong form Battaile, to give fire three ſeverall wayes at once. The Figure followeth.

The Command is,

Left-flanke, double your right-flank by diviſion,

The Direction is,

Halfe-files of the left-flank, face to the Reere: Front and Reere-halfe-ranks, move cleare of the Body, and ſtand: Front-halfe-files, face to the right; and Reere-halfe-files, to the left; and move even with the right-flank.



Halfe-ranks that doubled, face-about inward; Martch forth into your places.

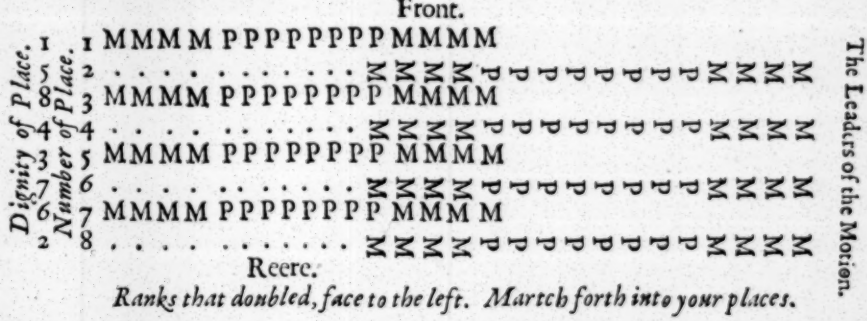
Note the inſtruction. The *motion* of this *doubling* is thus to be performed: The *Reere-halfe-files* of the *left-flank* face-about to the *right*, and then both the *Front-halfe-files* and *Reer-halfe-files* martch forth-right, untill they are cleare of that part of the *Body* that *ſtands*; then each *diviſion* faceth that way which they are to *double*, (which the *Front-halfe-files* muſt doe the *right*, the *Reer-halfe-files* to the *left*;) and ſo martch forth-right, untill the *Doubling* be performed. For the *Reducement*, you are to conceive, it may be diverſly performed. *The reducement.* If the Leader be at the *right-flank*, (which is the part that was *doubled*) then the *Reducement* is as followeth: The *halfe-ranks* that *doubled*, face-about inward, and martch forth right, untill they are cleare of the *right-flanke*, which *ſtands*; then the *Front-halfe-files* face to the *left*, the *Reer-halfe-files* to the *right*, and then *cloſe* their *diviſion*: the Leader going to his firſt *front*, and facing the whole *Body* to him, they are *reduced* as at firſt. So that the *right-flank* would *double* the *left-flank* by *diviſion*, the matter is the ſame; differing onely in the hand.

CHAP. XXVIII.

Of doubling Ranks intire.

Note the difference of dignity in this doubling. *Differing from doubling by halfe-files in diſtance.* *Doubling of ranks to the right intire, is a doubling both of Number and Place; and in ſome ſort worketh the ſame effect as the doubling of halfe-files to the right intire.* But differeth firſt in regard of the *parties*, which are the *Doublers*; and ſecondly, in the *diſtance* left after the *Doubling*. For the firſt, which is matter of *dignity*, the *fifth* and *ſixth* in honour are ranked together in the *Front*, the *ſecond* and *ſixth* in dignity make the *Ranke* in the *Reere*: So that the *Front* precedes the *Reere* $\frac{1}{4}$ in worth; whereas in *doubling* by *halfe-files*, the *Front* exceeded the *Reere* by $\frac{1}{3}$. Secondly, it differeth for *diſtance*, by leaving *Open Order*, at the leaſt, between all the *ranks*. For further ſatisfaction obſerve this Figure following.

The Command is, *Double your Ranks to the right entire.*
The Direction is, *Even ranks face to the right, and March: face to your Leader; and ranke even with the odde.*



Ranks that doubled, face to the left. Martch forth into your places.

The *motion* of this *doubling*, ought to be performed, as followeth; namely, if the *doubling* be to the *right*, as is above expressed by this figure: Every *even ranke, faceth to the right*. The *right-hand-man* of each *ranke*, becomming the *leader* of his *ranke file-wise*: leading them forth, and in their *martch* or moving forwards, a little bending to the *left*: that when the *left-hand-man* of each Rank, (which are the *bringers-up* of the *motion*) are cleer of the standing part of the *body*, by onely *facing* to the *front*, they may stand even in *ranke* with the rest of the *Company*. For *reducement* of this *doubling*, it may be as followeth. Command the ranks that *doubled*, to *face* to the *left*, and martch forth-right into their places. Or for variety, command *halfe-ranks* of the *right*, to *face* to the *left*, and *double* the *left-flank*. Both which, as the *Company* now stand, worke one and the same effect. The *left-hand-men of each ranke*, being the *leaders* of the *motion* in the *reducement*. To *double ranks* to the *left intire*, is to be done after the same manner; onely observing the *difference* of the *hand*. This *doubling* may also be done by *division*. But I spare the Figures.

Instructions for the Doubling.

Note that the left-hand-men, are the Leaders of the motion, in the reducement.

CHAP. XXIX.

Of doubling Files intire, advancing.

Doubling of *Files* to the *right intire*, advancing, is (also) a *doubling* both of *number* and *place*: for it increaseth the *depth*, to double their former *proportion* of number: as from *eight*, to *sixteene*; from *ten* to *twenty*; &c.

It also gaineth so much more *ground* before the *Front*, as formerly the *Battell* did containe: by *transferring* the *even Files* of the *body*, into the *ground*, before the *Front* of the *odde Files*: but this *doubling diminisheth* the number of the *length* of your *Battell*, although it preserves their *place*. I spare to speake further of it, onely thus. Let the antiquity of this *doubling* plead for its excellency, and if that may hold for a rule, then this may be ranked amongst the best. For further directions, observe the following Figure.

The Command is, *Double your Files to the right intire, advancing.*
The Direction is, *Even Files advance forwards, and place your selves before the odde files to the right.*

Front.

	16	14	12	10	8	6	4	2	
	M	M	P	P	P	P	M	M	
	M	M	P	P	P	P	M	M	
	M	M	P	P	P	P	M	M	
	M	M	P	P	P	P	M	M	
	M	M	P	P	P	P	M	M	
	M	M	P	P	P	P	M	M	
	M	M	P	P	P	P	M	M	
	M	M	P	P	P	P	M	M	
Left Flank.	16 M	14 M	12 P	10 P	8 P	6 P	4 M	2 M	1 Right Flanke.
	• M	• M	• P	• P	• P	• P	• M	• M	2
	• M	• M	• P	• P	• P	• P	• M	• M	3
	• M	• M	• P	• P	• P	• P	• M	• M	4
	• M	• M	• P	• P	• P	• P	• M	• M	5
	• M	• M	• P	• P	• P	• P	• M	• M	6
	• M	• M	• P	• P	• P	• P	• M	• M	7
	• M	• M	• P	• P	• P	• P	• M	• M	8

Reere.

Files that doubled, face-about to the left. Martch forth into your places.

Inſtructions to performe the doubling.

The reducement.

The *motion* of this *doubling* ought to be performed after this manner. The *odde files* are to *ſtand*, beginning your account from the *outmoſt file* to the *hand* named. The *Muskettiers* and *Pikes* of the *even files*, are to *advance* their *Armes*, and follow their *file-leaders*, every *file-leader* leading his *file* forth-right, before his next *file* to the right, untill the *bringers up* of the *even files*, are orderly placed, before the *leaders* of the *odde files*: as you may perceive by the *Figure*. For *reducement*; let the *Files* that *doubled, face-about* to the *left*; the *bringers-up* of each *file* leading them forth-right, downe the *Intervals*, which are on the *left-hand*, untill they are come *even* with the *Reere*: and then *ſtand*, and *face* to their *leader*, and they are reduced, as at firſt. The *doubling* of *Files* to the *left intire*, advancing, is after the ſame manner: it onely differeth in the *hand*: therefore I ſpare the *figure*. They that love to be curious, may likewiſe *double files*, by *diviſion*, *advancing*.

CHAP. XXX.

Of Files doubling their depth.

THis next *doubling* is a *doubling to the depth of the right intire*: and is likewiſe a *doubling of Files*, as the other laſt ſhewn in the precedent Chapter; Being alike both for *number* and *place*: notwithſtanding it *differeth* from the *other*, both in *manner* of executing and in ſome ſort of the *matter* executed. For whereas the other *doubling* by *advancing* of *files*, did *transferre* all the *even files* into the ground before the Front: Contrariwiſe, this *doubling* doth *transferre* them into the ground next behind the *Reere*. And as in the *other doubling*, you may perceive halfe the *file-leaders* to remaine in the *front*; the other halfe to be *halfe-file-leaders*: This *doubling* hath halfe the *file-leaders* in the *front*, the other halfe being the laſt *ranke* of the *Reer*: *thoſe which were the former *bringers-up* being become the two *innermoſt* or *middlemoſt rankes*. The *Figure* followeth, being demonſtrated as the *Body ſtands*: the *Motion* being ended.

* *By this doubling the bringers up become the two middle-moſt rankes.*

The Command is, *Files, double your depth to the right intire, every man falling behind his Bringer-up.*

The Direction is, *Even files from the right, face to the Reere, and every man place himselfe after his Bringer-up.*

Front.

	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
	•	M	•	M	•	P	•	P	•	P	•	P	•	M	•	M	1
	•	M	•	M	•	P	•	P	•	P	•	P	•	M	•	M	2
	•	M	•	M	•	P	•	P	•	P	•	P	•	M	•	M	3
	•	M	•	M	•	P	•	P	•	P	•	P	•	M	•	M	4
	•	M	•	M	•	P	•	P	•	P	•	P	•	M	•	M	5
	•	M	•	M	•	P	•	P	•	P	•	P	•	M	•	M	6
Left-Flank.	•	M	•	M	•	P	•	P	•	P	•	P	•	M	•	M	7 Right-Flank.
	•	M	•	M	•	P	•	P	•	P	•	P	•	M	•	M	8
		M		M		P		P		P		P		M		M	8
		M		M		P		P		P		P		M		M	7
		M		M		P		P		P		P		M		M	6
		M		M		P		P		P		P		M		M	5
		M		M		P		P		P		P		M		M	4
		M		M		P		P		P		P		M		M	3
		M		M		P		P		P		P		M		M	2
		M		M		P		P		P		P		M		M	1

Reere.

Files, as you were: Or, *Bringers-up, double your Ranks forward to the left.*

The manner of the *motion* for this *doubling*, is as followeth: The Command being given, *Files, double your depth to the right intire, every man falling behind his Bringer-up*: then the *even files*, accounting from the *hand* named, immediately *face-about* to the *right*, and the *Bringers-up* of each of the *even files* turne behind the *Bringers-up* of the *odde files*, that *ſtand*; and ſo every man, as he cometh down to the *Reere*, turneth to the *left* behind him that *martcheth* downe the next before him, untill thoſe that were the *Leaders* to the *even files* are become the *Bringers-up* to thoſe which were the *odde files*. The *Reducement* is as followeth: *Bringers-up that now are, double your ranks forward to the left.* Which being performed, they are as at the firſt. If you would be inſtructed in the manner, turne back and ſee it, where the *Bringers-up double* their *ranks* forward into the *Front*: It is the fourteenth Chapter.

The manner or way how this doubling ought to be performed.

The Reducement.

I have willingly paſt over another *doubling* of the *depth*, becauſe it is much after the manner of that which is done by *advancing file upon file*; which is the *doubling* of the laſt Chapter. It differeth onely thus: In the laſt Figure, the *even files martched* forth, placing themſelves before the *odde files*: and in this which I have omitted, the *even files* are to *face-about*, and *martch* forth-right towards the *Reere*, untill the *File-leaders* of the *even files* have placed themſelves juſt behind the *Bringers-up* of the *odde files*; and then every man *face* to his *Leader*. Some have a *doubling* of the *depth* by *Counter-martch*; which I conceive ſcarce worth penning, yet willing to leave every man to his owne liking; and as I ſee nothing in it, ſo I will ſay nothing of it. There are others that have written concerning *doublings* of *place*; nevertheleſſe, becauſe they are nothing but the *opening* of *ranks* and *files*, whereby the *length* or *depth* of your *Battell* is *extended*, and ſo *doubled* in *place*, and not in *number*, I forbeare to write further of them; deſiring not to treat of ſuch things as are more *curious* than *neceſſary*.

Some doublings omitted.

Doubling the depth by Counter-martch.

Doubling of place.

CHAP. XXXI.

Of Conversion and Inversion, with their words of Command, and Reducements.

ACcording to my promise, I will now shew the difference between *Inversion* and *Conversion*; whose very names are so intricate and troublesome (to many) that they are more puzled with the words then the work. Some are of opinion, that they are both one differing in *letter*, not in *matter*. Others would have a difference, if they could tell how, or where. But generally they are so chopt and changed one for the other, that the *Souldier* cannot in truth tell which is either. But that you may not be deceived, take this for a *rule* that *Inversion doth alwayes produce file* or *files*; and *Conversion, rank* or *ranks*. *Inversion* consists of *files filing*, or of *ranks filing*. *Conversion*, of *ranks ranking* to the *right* or *left*; or by *increase* of *files*, *ranking* by *even* or *uneven parts*: and of *ranks wheeling* to the *right* or *left*. I shall speak further of them in their severall places. But by the way you are to observe, that *Inversion* and *Conversion* require larger *distance* of *ground* than any other *motions*; which must be the *Officers* care to open the *ranks* or *files*, to such *distances* as shall be necessary to contain the *ranks* or *files* so to be *Inverted* or *Converted*; whether it be *double distance*, or twice *double-distance*, or any other lesser or larger quantity of ground. The words of *Command*, with their severall *Reducements*, are as followeth.

Inversion.

Inversion.

Files, file to the	Right.	*File-leaders, lead up your files as you were.*	Ranks, file to the	Right.	*Files, rank as you were*
	Left.			Left.	
Files, file to the Right and Left by division.				Right & Left.	

Conversion.

Conversion.

Ranks, rank	3. 5. 7. or 9. to the Right.	*Ranks, rank as you were*
	4. 6. 8. or 10. to the Left.	
	By increase 2. 4. 6. 8, &c. to the Right.	
	By increase 1. 3. 5. 7, &c. to the Left.	
	Intire to the Right into the Front.	
	Intire to the Left into the Front.	
	By division into the Front.	

Ranks, wheele to the	Right.	*For reducement; Face-about to the*	Right	*And wheel into your place*
	Left.		Left	
	Right & Left.		Right & Left	*Then face to your Leader*

Files, rank	3. 5. 7. or 9. to the Right.	*Ranks, file as you were*
	4. 6. 8. or 10. to the Left.	
	By increase (to the Right) 1. 3. 5. 7, &c.	
	By increase (to the Left) 2. 4. 6. 8, &c.	
	To the Right / To the Left into the Front.	

To avoyd the words of *Inversion* and *Conversion*, I have delivered the directions without naming either of them: onely I have exprest the *six* first words of *Command* to be *Inversion*, and the last *sixteen* to be *Conversion*. For I conceive it altogether unnecessary to adde to every word of *Command*, *Inversion*, or *Conversion*; for by so doing, the unlearned and ignorant *Souldier* will be so confused with the strangenesse of the word, that hee will scarce by any meanes be made capable of the *matter*. For mine own part, I have ever held this opinion, that the easiest *expressions* are ever to be preferred, in the way of *instruction* to *young Souldiers*. I might have much inlarged my selfe, in the words of *direction*, concerni

cerning this Subject, and have written concerning *ranks* and *files*, *ranking* by *decreaſe*; but theſe already expreſt may ſuffice to demonſtrate to any the grounds of all: and if any will be curious, by the practice of theſe, the reſt will be found. I alſo at firſt intended to have drawn a Figure, the more lively to have expreſt thereby each ſeverall word of *Command*; but, upon better conſideration, I perceived that ſome of them would require much roome, and not be ſo apt to print, without their Figures were cut, and were facile enough to the meaneſt capacity, by their words of *Command* and *Direction*; therefore, I conceive, the paines and coſt may be ſpared, delivering the Figures of ſome few of them, that are *moſt neceſſary*, and for the reſt, expreſſe by word what they will produce in Figure.

CHAP. XXXII.

Of Files filing in ſequence.

The Command is, *Files, file to the right.*

TO performe this *word* of *Command*, The *right-hand-file marcheth away ſingle*, the *ſecond file* from the *right* falleth into the *reere* of the *firſt*, the *third* behind the *ſecond*, the *fourth* behind the *third*; and ſo conſequently all the reſt of the *files* fall into the *reere* of their next *right-hand-files*, untill all the whole *Company* become one *file*. It may be uſefull to paſſe ſome narrow bridge, or thicket, or elſe-where, where but one at once can paſſe; the *Commander* being willing to preſerve his *files* intire and whole. The way for the *reducement* may be after this manner: The place being convenient, every *file-leader* is to *lead* up his *file* to the *left* of him that *martcheth* before him, untill all the *file-leaders* are *even* in *rank* together; their *files* orderly following them. The *word* for the *reducement* is, *File-leaders, lead up your files as you were.* For *files* to *file* on in *ſequence* to the *left*, may be performed after the ſame manner; it onely differeth in the *hand*, but works the ſame *effect*: onely, the *right-hand-file-leader* led the other, and the *left-hand-file* fell laſt of all into the *Reere*; this, contrariwiſe, is led forth by the *left-hand-file*, and the *right-hand-file* is the laſt that taketh place in the *Reere* of the *extended file*. *Inverſion.*

Files, file to the right and left by Diviſion.

Files filing by *diviſion*, is wrought after the ſame manner; but differeth in this, *That the right-hand-file of the Company, and the left-hand-file of the ſame, begin to lead forth at one and the ſame time, in their ſeverall places: The files of the right-flank falling file-wiſe behind the right-hand-file; the files of the left-flank falling in like manner behind the left-hand-file.* So that if the *Body* be *flanks* with *Muſquettiers*, then this *filing* by *diviſion* bringeth all the *Muſquettiers* into the *Front-Diviſion*, and the *Pikes* in the *Reere* of them. If there be an *odde file*, it moſt commonly falleth to the *right*. The *word* for *reducement* is, *File-leaders, lead up your files as you were.* This ſort of *Inverſion* is called, *Filing in ſequence.* I will now ſhew another ſort of *Inverſion*, which is by *Ranks filing*: The which I will demonſtrate unto you by two Figures, which will be ſufficient to inſtruct the deſirous.

CHAP. XXXIII.

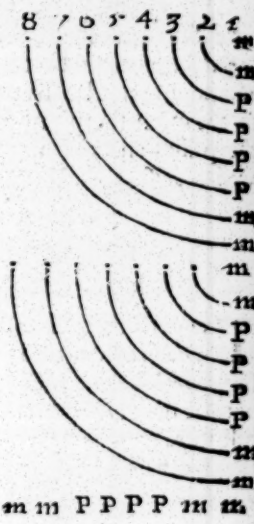
Of inverting Ranks; or, *Ranks filing.*

THis following Figure of *Inverſion*, is of *Ranks filing to the right*; *where all the Ranks are to be inverted to the out-moſt file to the right*: For the doing whereof, let all your *files* be *cloſed* to their *Order*, or *Cloſe-Order*, as ſhall be thought moſt neceſſary; the *ranks opened*, either *forward* or *backward*, to *double-diſtance*, or twice *double-diſtance*, (more or leſſe) as the *Commander* ſhall ſee moſt convenient, according to his number. Having *cloſed* your *files*, and *opened* your *ranks* unto their due *diſtance*, then let every *rank* move after his

his *right-hand-man*, untill every *ranke* ſtand right in *File*, after the *right-hand-leader* of his rank. In this Figure I have only *opened* the *foure firſt rankes* to their diſtance, and *inverted* but *two* of the *foure*. By which it may eaſily be perceived, both the *manner* of the *work*, and the *matter* which is to be *wrought*. But if the *Commander* will performe it upon a *Martch*; then they ſhall not need to *open* to any *diſtance*, but to take their *diſtance* in the *execution*; which is the eaſieſt way, and will be thus performed. The *right-hand-man* of the *firſt rank*, *martcheth* forth-right; all his *ranke facing* to the *right*, and *martching file-wiſe* after him. The *right-hand-man* of the ſecond *rank* falling immediately after the *left-hand-man* of the firſt *ranke*, all his *ranke* in like manner following of him. The *right-hand-man* of the third *rank*, after the *left-hand-man* of the ſecond; his *ranke* likewiſe following of him. And ſo for all the reſt, untill they are all become one *file*.

This kind of Inverſion beſt performed martching.

Ranks file to the right. Front.



This *Rankes filing*, is ſooner performed, and *reduced*, then *files filing*: and in the *reducement* will preſently be ready to make reſiſtance, againſt any oppoſition in the *front*. Whereas if *files file*, it will be a great while before the *file-leaders* will be able to make *good* the *front*: the manner of the *Reducement* of this *Figure*, is as followeth. If they were *eight* men before in *ranke*, then the firſt eight men, *ranke* to the *left*, into the *front*. The next *eight* men *ranke* next after them, which makes the ſecond *ranke*. The third *eight* men, *ranking* to the *left*, make the third *ranke*. And ſo forward for the reſt, untill they are *reduced*, as at the firſt. But it may be, that ſome will object, that in this *Figure* there is *mixture* of *Armes*; which if they will avoid, they may either *martch* forwards their *Musquetiers* of each *diviſion*, and *cloſe* them before the *Pikes*; and *invert* them firſt. Or they may *martch* forwards their *Pikes* firſt, and leave their *Musquetiers* to come in the *Reere*. Or if they pleaſe, they may upon a deepe *martch*, firſt *invert* the *front-diviſion* of *Musquetiers*, then their *Pikes*, and laſt the *reere-diviſion* of *Musquetiers*; which way ſoever it be done, the word for *Reducement* will be, *Files, Ranke as you were*.

The reducement.

Mixture of Armes hath many times proved advantagious.

By this deep Martch is to be underſtood a right induction according to Ælian.

Rankes, file to the Left, is performed after the ſame manner. It *differeth* from this laſt done, but onely in the *hand*. And whereas the *right-hand-file-leader*, was the *leader* of the laſt, this would be led by the *left-hand-file-leader*: The *left-hand-leader* of each *ranke*, leading forth his *Ranke-file-wiſe* as before it was performed, but to the *contrary hand*; I ſpare the *Figure*.

Ranks, Files to the left.

m m P P P P m m.

M M P P P P M M

M M P P P P M M
M M P P P P M M
M M P P P P M M
M M P P P P M M

Reere.

Files, ranke as you were.

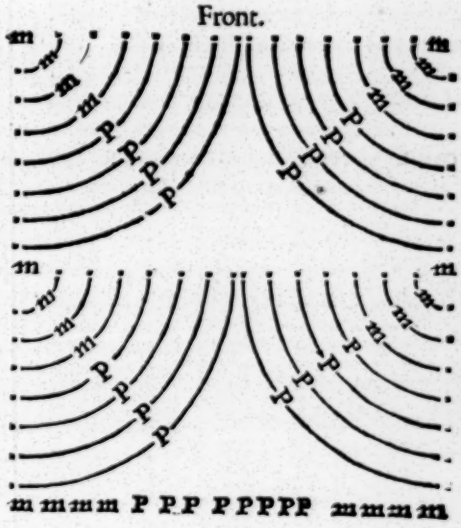
CHAP.

CHAP. XXXIV.

Of Ranks filing by diviſion; and how uſefull.

THis next *Figure* of *Inverſion* is, of *Ranks filing by diviſion*; and is a *doubling of the depth, by unequall proportion*: or whereas in moſt of all other *doublings* the number of the Length or Depth is augmented but to double their former proportion of number, this *doubling* of *Inverſion* makes their Depth ſo many times more in number as there are *Files* to *double*; or halfe ſo many times, if it be done by *Diviſion*; as in the next following *Figure*. It hath been of ancient uſe amongſt the *Grecians*, and in theſe our latter times it hath been held of ſpeciall uſe, to avoid the ſhot of the great Ordnance, when of neceſſity wee are to *march* againſt any *Battery*. It hath alſo been held good, to prevent the imminent danger of ſome great *ſhowre* of *ſmall ſhot*, likely to be poured out upon the *Front* of our *Battalia*. It may alſo ſerve for a *guard*, honourable *paſſage*, large *intervalle*, *ſtreet*, or *gallery* (as ſome call it) for any great *Perſonage* or *Commander* to paſſe through. It is alſo of common uſe for *lodging* of the *Colours* or *Enſigne*: And many other ſuch like.

Ranks, file to the right and left by diviſion.



Tacticks of Ælian. Chap. 30. pag. 6. line the laſt.

Files, ranke as you were.

For instruction how to performe this *motion*, It is the same with the last *Figure*; differing onely in this, that as in the other *Figure* all the whole *ranks* turned to the *right*, behind their *right-hand-men*; in this *motion*, the *left-flanke*, (or *halfe-rank* to the *left*) fall into the out-most *file* to the *left*; the *halfe-ranks* to the *right*, behind their severall *right-hand-men*: as you may perceive in part by the *Figure*. I have shewen the *Figure*, in the manner of the *action*, not fully performed. The *pricks rank-wise*, denoting the places from whence they came: The quarter-circles, shewing the way of the *motion*: the *pricks file-wise*, directing or shewing their places they are going to.

Reducement by Conversion.

For *reducement* to the *Figure*, it is no more than this: The *ranks* which before *inverted* into *files*, now again *convert* into *ranks*, as they were. The *word* of Command for it, *Files, rank to the right and left inward, as you were.*

Military Discipline too much slighted by middle sort of Citizens.

I hope this that hath already been shewen, will be sufficient (at least in some small measure) to give satisfaction to those, which as yet have not known what is meant by *Inversion*: Yet I could wish, that such as exercise the Companies of the Trained-Bands of the Kingdome, would rather make use of the plainer *word* of *demonstration*; which is, *Rank file*; or *Files, file*; and leave out the word *Inversion*, as a word not sutable with the capacity of divers of our Souldiers of the Trained-Bands; especially of this City, where Porters, Colliars, Water-bearers, and Broom-men, are thrust into the rooms of men of better quality, as though they themselves were too good to doe the King and their Country service.

CHAP. XXXV.

Of the severall parts of Conversion: and how they are to be understood.

THe next branch of *Discipline*, which I offer to your view, shall be of *Conversion*; and of its severall parts: Wherein, if there be any that think me tedious, let them turne over, and settle on some other part, which may be to them more delectable; whilest I, in the meane time, shall endeavour to give content to all: neither stuffing out my book with *needlesse discourses*, nor yet too much abbreviating the matter, whereby to render it too obscure unto the commonest capacity. Wherefore take their parts as they hereafter follow.

Conversion consists of these parts, *viz.* Of	Ranks ranking	*In equall parts.*	1
		In unequall parts.	2
		Intire into the Front.	3
		By division into the Front.	4
		By wheeling to the Flanks.	5
	Files ranking	*By equall parts.*	6
		By unequall parts.	7
		Intire into the Front.	8

Ranking in equall parts. This manner used both by Greeks and Romans; and is the best for a strait.

First, of *Ranks ranking* in *even* or *equall parts*: Which is to be understood, *when they are twelve, or twenty, (more or lesse) martching abrest, and the Commander (either for the narrownesse of a passage, or for some other intent) causeth his ranks to rank three, six abrest, or five, ten, or any other number, either according to the place, or occasion; every rank holding equality of number.*

Ranking in unequall parts.

Secondly, *Ranks* then *rank* by *unequall parts*, when they *rank by increase*, or *decrease*. As when the first *rank* shall be *three*, the next *five*, then *seven*, *nine*, &c. which is commonly used, for the making of *Diamond* and *Triangular Figures*.

Ranks ranking intire into the Front.

Thirdly, *Ranks* then *rank intire into the Front*, when the *first rank stands*, the *second rank placeth it selfe on the right or left of the first*, the *third by the second*, the *fourth*

he third, and ſo forward for all the reſt, untill *all the ranks*, (either to the *right* or *left*) according to direction, *are become one Ranke in the front.*

Ranks ranking by diviſion into the Front.

Fourthly, *ranks* then *rank by diviſion into the front*, when the *ſecond Ranke*, and all the reſt of the ranks behind, open to the *right* and *left*: the one part going to the *right*, the other o the *left*; *ranking even* with the *firſt*, as before, and all together making one *Rank.*

Ranks ranking to the flanks by wheeling.

Fifthly, *Ranks* then *ranke* to the *flanke*, or *flanks*, when either the *right-hand-man* of *ach ranke*, *or the left-hand-man* (or both together) *are as it were the Hindge of the moion, the reſt of each rank wheeling about them, to the right or left*, or each hand by diviſion, *untill that every ranke be brought into the diſtance which was before the Ranke*; *beweene the right-hand-man of the ranke next before, and the right-hand-man of the ſame anke you ſtand in.* If it be to the *left*, then they *wheele* into the *diſtance* betweene the *left-and-leaders* of each Ranke. If it be by *diviſion*, then *halfe* the ranke wheeleth to the *right*: he other *halfe* to the *left*, and produceth two Ranks.

Files ranking in equall parts.

Sixthly, *Files* then *ranke by equall parts*, when they ranke three, foure, or five abreſt, more or leſſe) ſtill keeping the number of men in ranke, of due proportion. If you ranke hree abreſt (either to the *right* or *left*) and your *File* be but eight deep, then the firſt ſixe hen make two ranks; the third rank muſt be made up by the leader of the ſecond *file*. And ſo or all the reſt. If you rank foure, and the *files* be eight *deepe*, then every *file* makes two anks. If you rank five, the *files* being eight *deepe*, then the firſt five men make a rank; nd the firſt two men of the ſecond *file* from the hand named, make up the *ſecond* ranke. Five of the other ſixe, make up the *third* ranke. And ſo forward for the reſt. If the *depth* of the *ile* were ten men, then it would make two *even* ranks.

Files ranking by unequall parts.

Seventhly, *Files* then rank by unequall parts, when they either rank by progreſſionall ncreaſe or by decreaſe: As when every ranke exceeds the rank before it, by two, three, or oure, be it more or leſſe. Or elſe that each rank decreaſeth, after the ſame manner.

Files ranking intire into the Front.

Eighthly, *Files* then rank intire into the *front*; when there is *ſo much diſtance betweene ile and file, as will containe each file, rank-wiſe*: *Every man in the file martching forward o the right or left, as ſhall be commanded, untill he ſtand even in rank with the leader of his ile, which brings the Body into one ranke.*

CHAP. XXXVI.

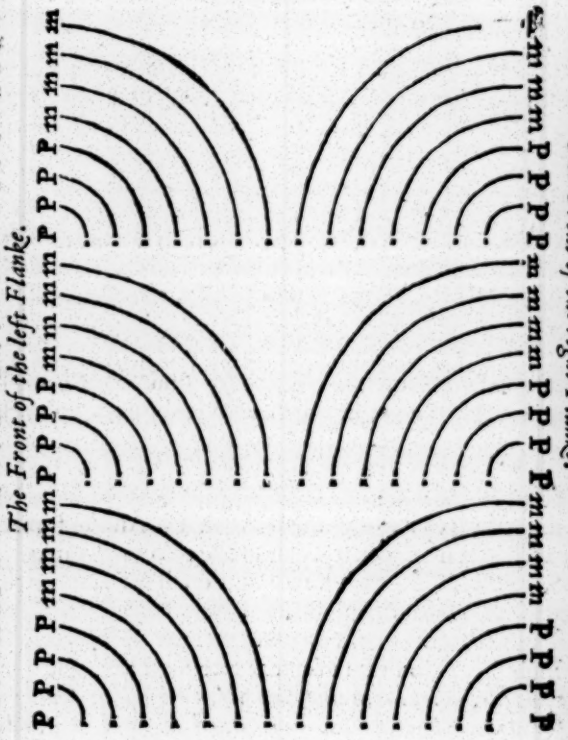
Of Ranks wheeling by converſion.

IF I would ſtrive to be *curious*, I ſhould need no other *ſubject* to lengthen my diſcourſe, but onely this of *Inverſion* and *Converſion*; which of it ſelfe would yeeld matter ſufficient to make a booke. But I have taken a larger taske: And therefore like the Artiſts in *Geography*, who ſometimes by a *ſpot* preſents a *Towne*, and by a *wrinckled line* a large River; ſo muſt I crave of the favourable Reader, that in this ſmall Treatiſe of *Diſcipline* he will not expect that I ſhould inlarge my ſelfe ſo amply, as I might upon every part. For then my booke would grow beyond his bounds, and I beyond my promiſe. But leſt I be taxed for digreſſion, this that hath already beene ſhewen may ſuffice for *converſion*. But becauſe it may be expected, that I ſhould ſhew *converſion* in *Figure*, as well as the other *Motions*, therefore to ſatisfie ſuch, I ſhall demonſtrate two *Figures* unto them, which may ſerve for all the reſt. The one ſhall be of ranks *wheeling by converſion*: the other of *files ranking foure to the left*. The word of *Command* for the firſt ſtands placed right over the *Figure.*

This *figure* of *Converſion* is of *rankes wheeling to the right and left*: or *rankes ranking to each flank by wheeling*. It differeth from *ranks filing*, both in manner and matter. In the manner thus, Whereas in *ranks filing* to the right and left, the *right* and *left-hand-file-leaders* preſerve and continue their places; and with that, their honours: In this *wheeling by converſion* to the *right* and *left*, contrariwiſe the *innermoſt file-leaders* become the *outmoſt* men in that part where the *front* ſtood; the other *file-leaders ranking even* within them. Some men have called this, *Ranks filing by Converſion, to the right and left*, but corruptly. For *converſion* alwaies produceth *ranks*, as I formerly ſaid: and *Inverſion, files*. But their miſtake groweth from this, that when *Ranks wheel to the right*, or *right* and *left*, then (ſay they) they by *wheeling* become *file*, or *files*, which is a palpable miſtake. For when we have any *command* for *wheeling*, it is a *maxime* for us to *wheele our aſpects unto the hand or part named*. By which doing, we either become rank or ranks; and not files, as ſome have ſought formerly to maintaine. One uſe, among many, for this *motion* is. It is the ſpeedieſt way for a great *Body* (if they have their due diſtance) to *give fire to one, or both flanks*, that as yet I know of.

The way to performe this *motion*, is as followeth. The *right* and *left-hand-man* of every ranke become the *Hinges* of the *motion*: the reſt of each rank *wheeling by equall diviſion* to the right and left abour, & above their right and left-hand-Leaders, untill they become ranks to the flanks; as you may perceive by the Figure, where the *pricks* denote unto you the places they ſtood in before the *motion*: the *quarter circles*, ſhewing the *way* of their motion, themſelves being converted into two ranks, ſheweth the motion executed. I have onely *converted* three of the ranks; for it would have taken too much room, to have *wheeled* all the *ranks*. And it is eaſie by this that is ſhewn to conceive the reſt. If you would avoid *mixture of Armes*, then place all your *Muſkettiers*, either in *front*, or *reer*; or elſe *wheel* only your *Muſkettiers*, and leave your *Pikes* ſtanding; Or it may be done, the *body matching* at *length*, the *Muſkettiers* being in the *front* and *reer diviſions*.

Ranks, wheele to the right and left by diviſion.
The firſt Front.



The word for the *reducement* is, *Ranks, rank as you were*.

The eaſieſt way for the *Reducement*, will be firſt for to *face* about to the *Reer*, and then to *wheel back* into their *places*. Then *face* to their *Leader*; and they will be reduced as at firſt. Now we will come to ſhew the next *figure* of *converſion*, which is of *files* converted into *Rankes* by *equall proportion*.

CHAP.

CHAP. XXXVII.

Of Files ranking in equall parts.

IN this *Chapter* I intend to shew the *manner of files ranking by Conversion in equall parts*; which *motion* I have seen used by some *Commanders*, at such times as their *Companies* have been but small, having not had above two or three *files* of *Musquettiers* upon a *flanke*, and being willing to *martch forth* their *Companies* in *divisions*. And this, because that two *a-breſt* would be somewhat improper (unleſſe it were upon neceſſity, in some narrow *paſſage*) & that three *a-breſt* is also somewhat with the thinneſt; therefore to augment the *Front* of their *martch*, they have *shortned* somewhat of their *depths*, in each *division*, by causing their *files* to *rank* foure or five, according as their *depth* may be, when the *Command* shall be given. This *motion* of *Converſion* may also be usefull for *larger Bodies*; for if upon a *martch* you are to paſſe thorow some *ſtrait*, where not above four or five can *martch a-breſt*, and that being paſt thorow, you are to direct your courſe to the *right* or *left*: If your way be to the *right*, then cauſe your *files* to *rank* to the *left*: If to the *left*, then let the *files rank* to the contrary hand. For by ſo doing, having paſt the *ſtrait*, and faced your *Body* that way which you intend your *Martch*, by commanding the *File-leaders* to *martch*, and the *half-files* to *ſtand* and take their places, your *Body* will be led again by their *proper File-leaders*, all *a-breſt*: the *Musquettiers* becomming again the *Flankers*, which in the paſſage of the *ſtrait* were in the *Front* and *Reere*. For the better underſtanding the manner of the *motion*, obſerve the following *Figure*.

Files, rank foure to the left.

Front.

This was the
1 File { M M M M f / M M M M h
2 File { M M M M f / M M M M h
3 File { M M M M f / M M M M h
4 File { M M M M f / M M M M h
5 File { P P P P f / P P P P h
6 File { P P P P f / P P P P h
7 File { P P P P f / P P P P h
8 File { P P P P f / P P P P h

9
P f
P
P
P P h
P

16 15 14 13 12 11 10

M M M M P P P P
M M M M P P P P
M M M M P P P
M M M M P P P
M M M M P P P
M M M M P P P
M M M M P P P
M M M M P P P

The way to performe this *Motion* is as followeth: The *Command* being firſt given (as above-ſaid) the *right-hand-file-leader* leadeth forth his *file*, and the *three next men* behind him move forwards to the *left* of each other, until they *rank even a-breſt* with their *file-leader*. The next *foure* in like manner *ranking* to the *left*, make the ſecond *rank*. The *file-leader* of the ſecond *file* placeth himſelfe next after him that was the *halfe-file-leader* of the firſt, which now is become the *right-hand-man* of the ſecond *rank*; the *three next men* behind him making up of his *rank* in like manner: And ſo forward for all the reſt, untill the *Motion* be fully perfected. This *converts* each *file* into two *ranks*, and brings all the proper *file-leaders* and *halfe-file-leaders* to make the *out-moſt file* to the *right*; the *bringers-on* both of the *Front* and *Rear-half-files* make the *outer-moſt file* to the *left*. The figures of number which are on the *left-flank* of the *Figure*, in which the word *file* added to each of

Direction for files ranking 4. to the left.

them, demonſtrates the *places* of the *firſt*, *ſecond*, *third*, and *fourth file*; and ſo conſequently for all the reſt, according to their *former ſtanding*, and the *places* they now occupy, being *converted* into *ranks*. The letters *f* and *h*, which are placed on the *right-flanke*, ſhewe the *places* of thoſe which were the *file-leaders* and *halfe-file-leaders*; each of the prope *file-leaders* having now his *half-file-leader* next after him. I have ſhewen this *Figure* par ly *performed*, partly *performing*, and partly *ſtanding* as before the *Motion* began.

The Reducement. For *reducement* of this *Motion* of *files ranking foure to the left*, one way is, to cau your *ranks* to *file* (or *invert*) *to the right*: which being done, *Command every File-leade to lead up his file to the left*; and ſo every man will have his *place*. For another way, *Fa*

A ſecond way of Reducement. *the whole Body to the right, and command the File-leader to martch, and halfe-files to ſtan and take their places*; and then they are all *reduced*; onely the *File-leaders* of the *right flank* are on the *left*, and the *File-leaders* of the *left-flank* are on the *right*; which is *reduced* by any *intire Counter-martch of rank or file.*

CHAP. XXXVIII.

The concluſion of Doublings.

THere are yet another ſort of *Doublings*, both of *length* and *depth*, which are perfo med by *diviſionall wheelings*: which becauſe they have ever been accounted for *whe lings*, I will not diſplace them; but ſtill rank them in their former places, although in tru they are *Doublings*: The *working part* indeed is *wheeling*; but the *intent*, or *thing wrough* is *Doubling*. I will ſpeak further of them when I come to ſhew them in their ſeverall place And here I mean to ſet a *Period* to our *Doublings*: Concluding, that thoſe *Souldiers* wh can put every one of theſe to his right uſe, as alſo give to each his right *reducement*, mu needs be skilfull and expert in this part of the *Art Military*. And contrariwiſe, they th are ignorant in theſe *Doublings*, can never truly attain to the right-managing of a *Foot-com pany*, either for *exerciſe* or *ſervice*. For *Doublings*, indeed, are the onely *Motions* for *v riety* and *alteration* of *Figures*, or *formes* of *Battaile*; no other *Motions* doing the lik And therefore, *Doublings* muſt needs be accounted the moſt *excellent* amongſt all t *Motions*.

YOu that have eyes to read, and skill to judge,
And have perus'd theſe Doublings *I have done,*
Though I have tedious *been, yet doe not grudge;*
For you know well, I have skipt over ſome:
But marvell not, the cauſe I doe not ſhew them;
It is not much materiall for to know them.

Thoſe that are skilfull in the Art *of* Warre,
And take delight to exerciſe *their* Men,
Shall find more pleaſure in theſe Doublings *farre,*
If that they intermixe *them now and then:*
And ſo contrive their Doublings *in theſe caſes;*
And laſtly, one word *brings them to their* places.

Why in our Country *doe wee* Captains *chuſe,*
That have no skill, *nor* art-full *inclination?*
They doe themſelves and Country *much abuſe,*
Thus to deceive *them in their expectation.*
I think the Cauſe *of this fault in our* Nation
Is, that our Gentry *holds not* Armes *in* faſhio

But ſome, perhaps, will ſay, I am too bold;
There's no ſuch need for Captains *to have* skill:
The Muſter-maſters *have enough (ſome hold)*
The Captains *and the* Counties *for to fill.*
So whilſt the Muſter-maſter *doth the* labour,
The Officers *may* play *upon a* Tabour.

But ſtay, me thinks, one pulls me by the ſleeve,
And tells me that I have my ſelfe forgot:
Wherefore of Doublings *here I take my leave;*
Intreating thoſe that read, miſtake *me not.*
Let *Muſter-maſters* take their *money*, then;
But let the *Captains* exerciſe their men.

CHAP

CHAP. XXXIX.

Of Counter-martches: Their Antiquity, and words of directions.

THe next branch of *Diſcipline* which offers it ſelfe to your peruſall, are *Counter-martches*: which are of three kinds. To wit, *Chorean, Lacedemonian, Macedonian*: which is, Maintaining, Loſing, and Gaining. Each of them are to be performed two manner of wayes. One by *File*: the other by *Ranke*.

There are alſo *Counter-martches, Intire*, and *Diviſionall*. But divers men are as divers in their opinions concerning the *Macedonian* and *Lacedemonian Counter-martches*. Some will have the *Macedonian*, a *Counter-martch* of gaining ground; becauſe that it transfers the *Battalia* into the ground before the *Front*. Others will have it, a *Counter-martch* of loſſe; becauſe (ſay they) the *Enemy* being in the *Reere*, it makes a ſemblance of flying. Some will have the *Lacedemonian*, a *Counter-martch* of gaining ground; becauſe the *Enemy* appearing in the *Reere*, it makes a ſemblance of charging or falling on. Others call it, a *Counter-martch* to loſe ground; becauſe it loſeth all that ground the *Battalia* ſtood upon; taking in ſtead thereof the ground behind the *Reere*. There are others of opinion, that there are *Counter-martches* of loſſe and gaine, in either of them. All theſe are furniſhed with *reaſons*, to back their *opinions*. But if I ſhould ſtand to ſhew their many and ſeverall reaſons, I might well be thought to be without reaſon my ſelfe. My opinion is, that taking the ground before the *Front*, is gaining ground: and that to leave the ground we ſtood on, to take the ground next behind the *Reere*, is loſſe of ground: And yet to take either, whereby there is advantage gotten, muſt needs be gaining. But where the matter it ſelfe is ſo indifferent, it were fondneſs to ſpend longer time about it. Wherfore note, that *Counter-martches* were of ancient uſe amongſt the Greeks many hundred of yeares ſince, and from them learned, and practiſed by many other *Nations*; and ſo ſtill continued unto this day. But as the *Snow-ball* by much rowling becomes the greater: So, in like manner theſe *Counter-martches* have received *addition* in all ages. So that the three originall ones are now become more then thirty, accounting thoſe *diviſionall*; and yet are all of them fathered upon one or other, of the three kinds. Though ſome of them will ſcarcely be owned or acknowledged; as you ſhall perceive, when I come to ſhew them in their ſeverall places. But amongſt all the *Motions*, this might be the beſt ſpared: as being leaſt beneficiall to this our *moderne Diſcipline*. But becauſe that *knowledge is no burthen*, and that at ſometimes they may be uſefull; therefore firſt take the *words* of *Command* or *Direction*, which are as followeth.

Diverſities of opinions concerning loſing and gaining of ground.

To go backe unto the ground we have formerly paſt, is loſſe of ground.

Counter-martches of great antiquity.

Counter-martches leaſt uſefull of all other parts of the Art Military.

Intire Counter-martches by File.

Files to the { *Right* / *Left* } *hand, Counter-martch.* Chorean.

Files to the { *Right* / *Left* } *Counter-martch, every man turning on the ground he ſtands.* Lacedemo.

File-leaders face about to the { *Right* / *Left* } *the reſt paſſe through to the* { *Right* / *Left* } *and place your ſelves behind your Leader.* Macedoni.

File-leaders ſtand; the reſt paſſe through to the { *Right* / *Left* } *placing your ſelves before your Leaders.* Baſt. Counter-martch.

File-leaders ſtand; the reſt paſſe through to the { *Right* / *Left* } *placing your ſelves before your Leaders; following your Bringers up.* Baſt. Coun:

Bringers-up face about to the { *Right* / *Left* } *the reſt paſſe through to the* { *Right* / *Left* } *and place your ſelves before your Bringers-up.* Lacedemo.

Bringers

Lacedemo. *Bringers-up, ſtand: the reſt of the Body paſſe through to the* {*Right*, *Left*} *placing your ſelves behind your Bringers-up.*

Intire Counter-martches, by Ranks.

Cretan or Chorean. *Ranks to the* {*Right*, *Left*} *Counter-martch.*

Lacedemo. *Ranks to the* {*Right*, *Left*} *Counter-martch, every man turning on the ground he ſtands.*

Macedoni. *Right-hand-File, face to the left: the reſt paſſe through to the right: placing your ſelves behind your right-hand-men.*
Left-hand-file may face to the right, and doe as much.

Baſt. Counter-martch. {*Right*, *Left*} *hand-file ſtand; the reſt paſſe through to the* {*Right*, *Left*} *placing your ſelves on the out-ſide of your* {*Right*, *Left*} *hand-men.*

Lacedemo. {*Right*, *Left*} *hand-file Face to the* {*Right*, *Left*} *the reſt paſſe through to the* {*Right*, *Left*} *placing your ſelves before your* {*Right*, *Left*} *hand-men.*

Diviſionall Counter-martches, by Files.

Cretan, or Chorean, Baſt. Count. *Counter-martch Front and Reere into the midſt.*

File-leaders, and half-file-leaders, ſtand; the reſt paſſe through to the right, and place your ſelves before your Leaders.

Lacedemo. *File-leaders, and bringers-up, ſtand; the reſt paſſe through to the right: and place your ſelves before your Leaders and Bringers-up.*

Macedoni. *File-leaders, face about; Bringers-up, ſtand; the reſt paſſe through to the right; and place your ſelves behind your leaders and bringers-up.*

Baſt. Count. *Front-half-files, interchange ground with the reere.*

Diviſionall Counter-martches, by Ranks.

Chorean or Cretan. Lacedemo. *Counter-martch your wings (or flanks,) into the midſt (or Center.)*

The outmoſt file of each Flanke, face outward: the reſt paſſe through to the right and left placing your ſelves before your out-ſide men.

Macedoni. *The out-moſt file of each Flanke, face inward: the reſt paſſe through to the right and left placing your ſelves behind your out-ſide men.*

Baſt. Counter-martch. *The out-moſt file of each Flanke, ſtand: the reſt paſſe through to the right and left, and place your ſelves on the out-ſide of your out-ſide men.*
Interchange your Flanks.

Note what is done by the *out-moſt Files*, may be *reduced* by controverting the *command* to the *innermoſt Files*; but muſt be done before they have cloſed their *diviſions*, &c.

CHAP. XL.

Of the Chorean Counter-martch: and the way to performe it.

The diſtance for Counter-martch, is ſix foot, or open order in rank and file.

I Could willingly have prickt a *Figure* for each of theſe *Counter-martches*, but that they will take up too much roome. And therefore I will onely prick ſome few of the hardeſt of them; and for the reſt, I will endeavour by words to make them as *facile* as I may: that ſo they may be apprehended by the meaneſt capacity. And firſt I will begin with the (*Perſian, Cretan*, or) *Chorean counter-martch.* The *word* of *Command*, or *Direction* is,

Files to the right-hand, Counter-martch.

[a] *Note that when there is a Counter-martch comman-*

[a] This *Chorean Counter-martch*, is by ſome called the *Modern Counter-martch*. I conceive their reaſon to be, becauſe that it is more in uſe then any of the other: Or elſe, for antiquity, it might claim many Ages. It is a *Counter-martch maintaining ground*: for it worketh its effect on the ſame *ground it ſtands*; neither *loſing* nor *gaining*. But it *transfers* the *file-*

file-leaders into the *place* of the *bringers-up*: and the *bringers-up* into the *place* of the *file-leaders*: withall turning the *aſpect* of the *Body*, or *Battalia*, to the *Reere*. The way to performe this *motion* is as followeth: As ſoon as the [b] *Word of Command* is given, if it be to the *right*, then all the *file-leaders* ſtep forwards with their right legs, and *face-about to the right*; every *file-leader* with his *file* following him, paſſing down towards the *Reer*, through the *intervall* on his right-hand, ſtill obſerving to keep *even* in *rank* with his *right-hand-man*. But, by the way, note that no man muſt *turne* untill hee come to the *ground* where at firſt his *file-leader* began the *Counter-martch*. This *Motion* is then performed, when the *Bringers-up* have attained unto the *place* where before their *file-leaders* ſtood; being *faced* right after them.

ded without any other addition, then it is always intended a Chorean Counter-martch.

[b] *Obſerve the direction for the* Chorean Counter-martch.

Files to the left-hand, counter-martch.

To *counter-martch* to the *left*, worketh the ſame effect, and is done after the ſame manner; onely *differing* in the *hand*.

For *reducement*: If you *counter-martch* to the *right*, doe as much to the *left*, and they will be as they were. For any *intire Counter-martch* of *files* will be *reduced* (of what kind ſoever) by making another *intire Counter-martch*, to what *hand* ſoever.

But if any deſire to be ſo *curious*, as to have them not onely *reduced* to the ſame *aſpect*, but alſo *preciſely* to the ſame *place*; then, if the *Counter-marteh* were to the *right*, *counter-martch* againe to the *right*; if to the *left*, accordingly to the *left*.

CHAP. XLI.

Of Counter-martching to loſe ground.

The Command is, *Files to the right, counter-martch; every man turning after his Leader on the ground hee ſtands.*

THis Lacedemonian *Counter-martch*, is a *Counter-martch of loſſe of ground*; *for that it leaves all the ground the Battalia formerly did containe, and in lieu or place thereof taketh the ground behind the Reere.* This *Counter-martch* is to be performed when the *Body* is upon a *ſtand*: And (as the *Chorean*) it turnes the *Aſpect towards the Reere.* The *Greeks* were wont with this *Counter-martch* to bring their *file-leaders* to oppoſe any Enemy appearing in the *Reere*; thereby gallantly bearding their Enemies in the teeth: neither politickly making ſhew of *flight*, whereby to bring the Enemy into *diſ-array*; nor over-providently carefull of the *advantage of ground.* The *Motion* of this *Counter-martch* is to be performed as followeth: The *file-leaders* of each *file* are to ſtep ſide-wayes to the *right*, and therewithall to *face-about* to the *Reere*, and ſo *martch* even in *rank* together down between the * *Intervalls*, no man advancing a *foot* forwards, but turning in like manner after their *Leaders*, when they are paſt by them; ſtill obſerving to keep their due diſtance: And ſo a whole *rank* together, ſtill turning off to the *right*, each *rank* ſucceſſively doing the like, untill the *Counter-martch* be fully performed. Any *intire Counter-martch* of *files* will *reduce* this. But, for order ſake, take one of the ſame ſort to the contrary *hand*; which is,

* *An Intervall is the ſpace of ground between file and file, or ranke and rank; but in this place is intended the ſpace of ground between the files.*

Files to the left, counter-martch; every man turning after his Leader, on the ground hee ſtands.

I ſhall not need to ſpeak further concerning this *Counter-martch* of loſſe of ground to the *left*, ſeeing that it differs from the other onely in the alteration of the *hand*: the ſubſtance and effect of both being one and the ſame. Only I will now ſpeak of a ſecond ſort of *Counter-martch*, which is of the ſame kind: The Command is,

Bringers-up, face-about to the right; the reſt paſſe through to the Reere, and place your ſelves before your Bringers-up.

Lacedemo. *Bringers-up, ſtand: the reſt of* {*Right*, *Left*} *the Body paſſe through to the* {*Right*, *Left*} *placing your ſelves behind your Bringers-up.*

Intire Counter-martches, by Ranks.

Cretan or Chorean. *Ranks to the* {*Right*, *Left*} *Counter-martch.*

Lacedemo. *Ranks to the* {*Right*, *Left*} *Counter-martch, every man turning on the ground he ſtands.*

Macedoni. *Right-hand-File face to the left: the reſt paſſe through to the right: placing your ſelves behind your right-hand-men.*
Left-hand-file may face to the right, and doe as much.

Baſt. Counter-martch. {*Right*, *Left*} *hand-file ſtand; the reſt paſſe through to the* {*Right*, *Left*} *placing your ſelves on the out-ſide of your* {*Right*, *Left*} *hand-men.*

Lacedemo. {*Right*, *Left*} *hand-file Face to the* {*Right*, *Left*} *the reſt paſſe through to the* {*Right*, *Left*} *placing your ſelves before your* {*Right*, *Left*} *hand-men.*

Diviſionall Counter-martches, by Files.

Cretan, or Chorean. Baſt. Count. *Counter-martch Front and Reere into the midſt.*
File-leaders, and half-file-leaders, ſtand; the reſt paſſe through to the right, and place your ſelves before your Leaders.

Lacedemo. *File-leaders, and bringers-up, ſtand; the reſt paſſe through to the right: and place your ſelves before your Leaders and Bringers-up.*

Macedoni. *File-leaders, face about; Bringers-up, ſtand; the reſt paſſe through to the right; and place your ſelves behind your leaders and bringers-up.*

Baſt. Count. *Front-half-files, interchange ground with the reere.*

Diviſionall Counter-martches, by Ranks.

Chorean or Cretan. *Counter-martch your wings (or flanks,) into the midſt (or Center.)*

Lacedemo. *The outmoſt file of each Flanke, face outward: the reſt paſſe through to the right and left placing your ſelves before your out-ſide men.*

Macedoni. *The out-moſt file of each Flanke face inward: the reſt paſſe through to the right and left placing your ſelves behind your out-ſide men.*

Baſt. Counter-martch.
The out-moſt file of each Flanke, ſtand: the reſt paſſe through to the right and left, and place your ſelves on the out-ſide of your out-ſide men.
Interchange your Flanks.

Note what is done by the *out-moſt Files*, may be *reduced* by controverting the *command* to the *innermoſt Files*; but muſt be done before they have cloſed their *diviſions*, &c.

CHAP. XL.

Of the Chorean Counter-martch: and the way to performe it.

The diſtance for Counter-martch, is ſix foot, or open order in rank and file.

I Could willingly have prickt a *Figure* for each of theſe *Counter-martches*, but that they will take up too much roome. And therefore I will onely prick ſome few of the hardeſt of them; and for the reſt, I will endeavour by words to make them as *facile* as I may: that ſo they may be apprehended by the meaneſt capacity. And firſt I will begin with the (*Perſian, Cretan*, or) *Chorean counter-martch.* The *word* of *Command*, or *Direction* is,

Files to the right-hand, Counter-martch.

[a] *Note that when there is a Counter-martch comman-*

This [a] *Chorean Counter-martch*, is by ſome called the *Modern Counter-martch.* I conceive their reaſon to be, becauſe that it is more in uſe then any of the other: Or elſe, for antiquity, it might claim many Ages. It is a *Counter-martch maintaining ground*: for it worketh its effect on the ſame *ground it ſtands*; neither *loſing* nor *gaining*. But it *transfers* the

file-

file-leaders into the *place* of the *bringers-up*: and the *bringers-up* into the *place* of the *file-leaders*: withall turning the *aſpect* of the *Body*, or *Battalia*, to the *Reere*. The way to performe this *motion* is as followeth: As ſoon as the [b] *Word of Command* is given, if it be to the *right*, then all the *file-leaders* ſtep forwards with their right legs, and *face-about to the right*; every *file-leader* with his *file* following him, paſſing down towards the *Reer*, through the *intervall* on his right-hand, ſtill obſerving to keep *even* in *rank* with his *right-hand-man*. But, by the way, note that no man muſt *turne* untill hee come to the *ground* where at firſt his *file-leader* began the *Counter-martch*. This *Motion* is then performed, when the *Bringers-up* have attained unto the *place* where before their *file-leaders* ſtood; being *faced* right after them.

ded without any other addition, then it is always intended a Chorean Counter-martch.

[b] Obſerve the direction for the Chorean Counter-martch.

Files to the left-hand, counter-martch.

To *counter-martch* to the *left*, worketh the ſame effect, and is done after the ſame manner; onely *differing* in the *hand*.

For *reducement*: If you *counter-martch* to the *right*, doe as much to the *left*, and they will be as they were. For any *intire Counter-martch* of *files* will be *reduced* (of what kind ſoever) by making another *intire Counter-martch*, to what *hand* ſoever.

But if any deſire to be ſo *curious*, as to have them not onely *reduced* to the ſame *aſpect*, but alſo *preciſely* to the ſame *place*; then, if the *Counter-martch* were to the *right*, *counter-martch* againe to the *right*; if to the *left*, accordingly to the *left*.

CHAP. XLI.

Of Counter-martching to loſe ground.

The Command is, *Files to the right, counter-martch; every man turning after his Leader on the ground hee ſtands.*

THis Lacedemonian *Counter-martch*, is a *Counter-martch of loſſe of ground*; *for that it leaves all the ground the Battalia formerly did containe, and in lieu or place thereof taketh the ground behind the Reere.* This *Counter-martch* is to be performed when the *Body* is upon a *ſtand*: And (as the *Chorean*) it turnes the *Aſpect towards the Reere*. The *Greeks* were wont with this *Counter-martch* to bring their *file-leaders* to oppoſe any Enemy appearing in the *Reere*; thereby gallantly bearding their Enemies in the teeth: neither politickly making ſhew of *flight*, whereby to bring the Enemy into *diſ-array*; nor over-providently carefull of the *advantage of ground*. The *Motion* of this *Counter-martch* is to be performed as followeth: The *file-leaders* of each *file* are to ſtep ſide-wayes to the right, and therewithall to *face-about* to the *Reere*, and ſo *martch* even in *rank* together down between the * *Intervalls*, no man advancing a *foot* forwards, but turning in like manner after their *Leaders*, when they are paſt by them; ſtill obſerving to keep their due diſtance: And ſo a whole *rank* together, ſtill turning off to the *right*, each *rank* ſucceſſively doing the like, untill the *Counter-martch* be fully performed. Any *intire Counter-martch* of *files* will *reduce* this. But, for order ſake, take one of the ſame ſort to the contrary *hand*; which is,

* *An Intervall is the ſpace of ground between file and file, or ranke and rank; but in this place is intended the ſpace of ground between the files.*

Files to the left, counter-martch; every man turning after his Leader, on the ground hee ſtands.

I ſhall not need to ſpeak further concerning this *Counter-martch* of loſſe of ground to the *left*, ſeeing that it differs from the other onely in the alteration of the *hand*: the ſubſtance and effect of both being one and the ſame. Only I will now ſpeak of a ſecond ſort *Counter-martch*, which is of the ſame kind: The Command is,

Bringers-up, face-about to the right; the reſt paſſe through to the Reere, and place your ſelves before your Bringers-up.

Lacedemo. This *Lacedemonian Counter-martch* doth alſo loſe the ground whereon it formerly ſtood; and takes the ground behind the *Reere*. The manner of the *Motion* is as followeth: The laſt *rank* (or *Bringers-up*) *face-about to the Reere, and ſtand*; the reſt of the *Body facing-about* in like manner, and paſſing through or between their *Bringers-up*, and placing themſelves *even* in *rank* before them. The *Motion* is begun by the *ranke* next the *Bringers-up*, and ſo continued ſucceſſively by the reſt, untill the *Counter-martch* be ended. It may be *reduced* by doing the ſame to the *contrary hand*. Nevertheleſſe, for brevity ſake, I will make uſe of a ſprig from the ſame bough, and *reduce* this *Lacedemonian Counter-martch* by another of the ſame kind. The Command is,

Bringers-up, ſtand; the reſt paſſe through to the right, and place your ſelves behind your Bringers-up.

Lacedemo. This *Lacedemonian Counter-martch* is thus to be performed: The laſt *rank* (or *Bringers-up*) are to *ſtand*, and the reſt of the *Body* to *face* to the *Reere*, and paſſe through to the *right*, and place themſelves behind their *Bringers-up*; contrary to the *Counter-martch* laſt ſhewen, where they placed themſelves before. The *Motion* is alſo begun by the ſecond *ranke* from the *Reere*, the reſt following ſucceſſively, untill the *File-leaders* are become the *Bringers-up*; then *face* them about after their proper *File-leaders*, and they are *reduced*.

CHAP. XLII.

Of Counter-martches to gain ground; or, the Macedonian Counter-martch.

The Command is,

File-leaders, face-about to the right; the reſt paſſe through to the right, and place your ſelves behind your Leaders.

Macedoni. THis *Macedonian Counter-marth* is for *gaining ground*; for that it leaves the ground the *Battalia* formerly ſtood upon, taking in *lieu* thereof the ground next before the *Front*: It alſo turns the *aſpect* towards the *Reere*. The *motion* of this *Counter-martch* is from the *Reer* to the *Front*; contrary to the *Lacedemonian*, whoſe *Motion* is from the *Front* to the *Reere*. This *Macedonian Counter-martch* makes ſemblance in the *Reere* of *flight*, but preſently produceth an orderly ſetled *Front*, when perhaps the Enemy, with a two early purſuit, hath broken the order of their array.

Macedon. *Counter-martch makes ſemblance of flight.*

The way to performe this *Counter-martch*, according to the directions formerly given, is as followeth: The *file-leaders* (or firſt *ranke*) *face-about to the right*; the reſt of the *body* paſſe through between the *Intervalls* (or diſtances of files) to the *right*, and place themſelves behind their *Leaders*; every *rank* (beginning with that next the *file-leaders*) paſſing through ſucceſſively, and taking their places, untill the *Counter-martch* be fully executed. It may be *reduced* as the reſt, by doing the ſame to the *contrary hand*: or, as I have formerly ſaid, by any *intire Counter-martch* of *file*; and therefore I will *reduce* it by another *Macedonian Counter-martch*. The Command is as followeth:

File-leaders, face to the Reere; the reſt of the Body paſſe through to the left, following your Bringers-up, placing your ſelves behind your Leaders.

Macedonia. This *Macedonian Counter-martch* is rather remembred for its antiquity than excellency, (as ſome more of them be;) nevertheleſſe, if any will be curious to obſerve the *Motion*, it may be performed as followeth: The *firſt ranke* (or *file-leaders*) *face* to the *Reere*, then the *laſt ranke* begin the *Counter-martch*, paſſing forward between the *Intervals*; the *ſeventh ranke* following the *eighth*, the *ſixth* following the *ſeventh*, and ſo likewiſe the reſt, untill the whole *Body* be transferred into the ground before the *Front*; and then joyntly together *facing to the right-about*, after their *Leaders*, the *Counter-martch* is ended. For *reducement*, obſerve this for all, that any *intire Counter-*

martch

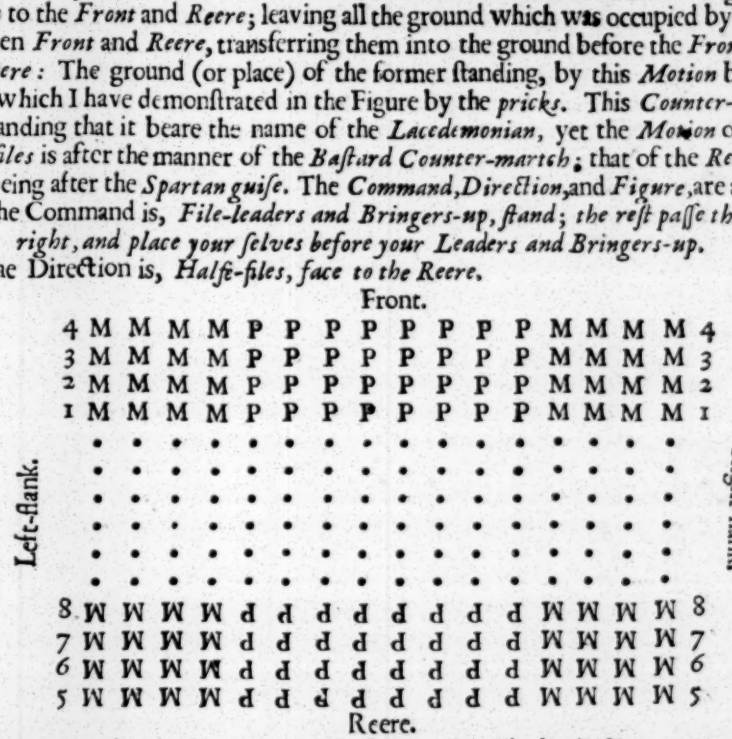
CHAP. XLIX.

A divisionall Counter-martch, to make a large Intervall between the first and last Ranks.

THis *Divisionall* Lacedemonian *Counter-march* makes semblance of *charging*, or *falling on* to the *Front* and *Reere*; leaving all the ground which was occupied by the Souldiers twixt *Front* and *Reere*, transferring them into the ground before the *Front*, and behind the *Reere*: The ground (or place) of the former standing, by this *Motion* becoming vant; which I have demonstrated in the Figure by the *pricks*. This *Counter-martch*, notwithstanding that it beare the name of the *Lacedemonian*, yet the *Motion* of the *Front-halfe-files* is after the manner of the *Bastard Counter-martch*; that of the *Reer-halfe-files* ily being after the *Spartan guise*. The *Command*, *Direction*, and *Figure*, are as followeth.

The Command is, *File-leaders and Bringers-up, stand; the rest passe through to the right, and place your selves before your Leaders and Bringers-up.* Lacedemo.

The Direction is, *Halfe-files, face to the Reere.*



The way to performe this *Motion* is as followeth: The *halfe-files* are commanded to passe to the *Reere*, and then the *Front-halfe-files* passe through to the *right*, placing themselves before their *Leaders*; the *second ranke* before the *first*, the *third* before the *second*, the *fourth* before the *third*; the *Reere-halfe-files* at the same instant passing through to the *Reere*, after the same manner, and placing themselves before their *Bringers-up*. You may perceive by the figures of *Number*, placed on the *flanks* of the *Figure* of *Battell*, both how the men stood before the *Motion* began, as also how, and in what place they stand, the *Motion being ended*. For the *Reducement*, if you have not closed their *distance*, you may *face* them *about*, and so let them passe againe into their places: Or else, by doing the same *Counter-martch* over againe, or to the *contrary hand*, or any such like way, will *reduce* them. This next following *Counter-martch* will also *reduce* them; or this will *reduce* that. The *Command* and *Direction* is, as you shall find it placed over the *Front* of the *Figure*. *If you reduce them by another Counter-martch, first close your divisions.*

CHAP. L.

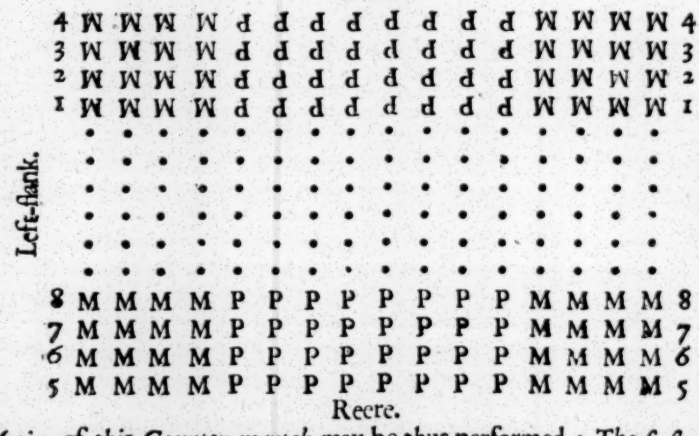
Of making a large Intervall between the first and last ranks, by the Macedonian *Counter-martch.*

THis *divisionall* Macedonian *Counter-martch*, is little different from that next before it; onely the other turned the *aspect outward*, to the *Front* and *Reere*, this *Counter-martch* Macedon.

martch turnes the *aſpect inwards, towards the midſt.* It may be uſefull, if the *Commander* would ſhew or publiſh ought before his beſt Souldiers, for that it not onely leaves a large *diſtance*, but that it brings the beſt Souldiers into the *midſt*, with their *aſpects* directed *inwards*. It may alſo ſerve to conduct any great *Perſonage* croſſe the length of your *Battell*, whereby to ſhew them the *bravery* of your Souldiers, &c. The *Figure* followeth.

The Command is, *File-leaders face-about; Bringers-up, ſtand; the reſt paſſe through to the right, and place your ſelves behind your File-leaders and Bringers-up.*

The Direction is, *Halfe-files, face to the Reere.*



Note that when the Reer-halfe-files face-about, the laſt rank, which are the bringers-up, are ſtill to keep their ſtanding.

The *Motion* of this *Counter-martch* may be thus performed: The *firſt rank* (or *file-leaders*) *face-about*, the *laſt rank ſtands*, the *Reere-halfe-files face-about*, and ſo the *Front-diviſion* paſſe forwards, and place themſelves behind the *file-leaders*, the *Reere-halfe-files* behind the *bringers-up*. The manner you may perceive the plainer, if you note the figures of *number* which are placed on the *flanks* of the *Figure*; their *number* ſhewing the places they had from the *Front* before the *Motion* began. This *Figure* may be *reduced* either by the ſame word of *Command* which produced it, or elſe by any of the fore-going *Diviſionall Counter-martches*. Our next ſhall be a *Counter-martch* of *exchange of ground*. The words for *Command* and *Direction* follow in the next Chapter.

CHAP. LI.

Of Interchanging ground.

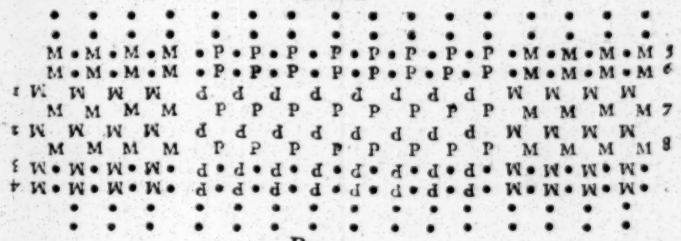
THis *Interchanging of ground*, or *Baſtard Counter-martch*, may not rightly be ſaid to be derived from any one of the particular grounds of *Counter-martch*; but rather participating of them all: And yet, conſidering it actually performed, it is different from them all. For whereas the other *Counter-martches* of *files* in *diviſion*, although they bring the *Front* and *Reere* into the *middeſt*, yet the *Front-halfe-files* continue ſtill on the ſame part, and the *Reere-halfe-files* doe not alter into the places of the other: But this, contrary to any other of the *diviſionall Counter-martches, transferres the Front-halfe-files into the ground or place of the reer-halfe-files; and them into the contrary part, bringing the file-leaders and bringers-up together into the midſt.* The following *Figure* demonſtrates the *body* in *motion*.

The Command is, *Front and Reer-halfe-files interchange ground.*

The Direction is, *Front-halfe-files, face to the Reere, then both diviſions move ſtraight forwards to the right.*

Front

Front.



Reere.

Baſt. Counter-martch in motion.

The way to performe this *motion* is as followeth. The *Front-half-files face-about*, paſſing forward to the *right* (being led by the *bringers-up* of the *front-half-files*) between the *Intervals* toward the *reere*; The *reer-half-files* at the ſame inſtant in like manner *martching* forwards, betweene the *Intervals*, on their right hands into the *front*, untill the *front-diviſion* have attained the places of the *reere*, and they contrariwiſe the *places* of the *Front*. For the *Reducement* of this *Counter-martch*, doe as much backe againe: Or if you would *reduce* it ſome other way, you may firſt make an intire *counter-martch* of *files*, and then *counter-martch front* and *reere* into the *midſt*; for under two *counter-martches* it will not be *reduced*. Now I will paſſe to ſhew *diviſionall Counter-martches* of *ranks* or *flanks*, The firſt ſhall be *Chorean*, as in the *Chapter* following. The reducement.

CHAP. LII.

Of Counter-martching the flanks (or wings) into the midſt of the Battell.

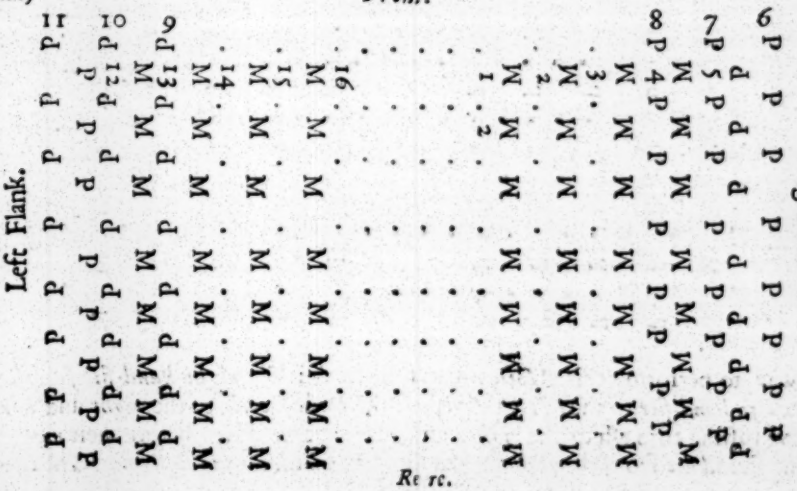
THis *Chorean counter-march* of the *Wings* (or *flanks*) into the *midſt* is ordinarily uſed when the *Commander* would bring the light armed into the *midſt* of the *battell*, to ſecure them from the incurſions of the *Horſe*. It is a *Motion* to dangerous to meddle withall in the eye of the Enemy, although the Souldiers be expert; but by no meanes to be thought upon in the field, amongſt the untrained and unskillfull. This *counter-martch* performes the *Motion* on the ſame ground. The *Figure* followeth.

The Command is, *Counter-martch your flanks into the midſt.*

The Direction is, *Face to the Right and Left.*

Chorean,

Front.



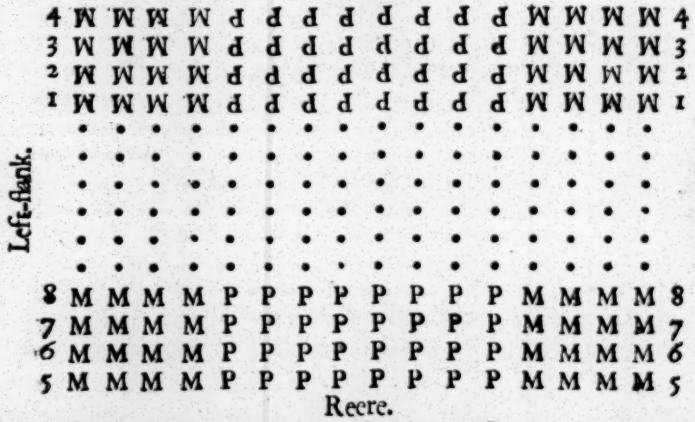
The

martch turnes the *aſpect inwards, towards the midſt.* It may be uſefull, if the *Commander* would ſhew or publiſh ought before his beſt Souldiers, for that it not onely leaves a large *diſtance*, but that it brings the beſt Souldiers into the *midſt*, with their *aſpects* directed *inwards*. It may alſo ſerve to conduct any great *Perſonage* croſſe the length of your *Battell*, whereby to ſhew them the *bravery* of your Souldiers, &c. The *Figure* followeth.

The Command is, *File-leaders face-about; Bringers-up, ſtand; the reſt paſſe through to the right, and place your ſelves behind your File-leaders and Bringers-up.*

The Direction is, *Halfe-files, face to the Reere.*

Front.



Reere.

Note that when the Reer-halfe-files face-about, the laſt rank, which are the bringers-up, are ſtill to keep their ſtanding.

The *Motion* of this *Counter-martch* may be thus performed: The *firſt rank* (or *file-leaders*) *face-about*, the *laſt rank ſtands*, the *Reere-halfe-files face-about*, and ſo the *Front-diviſion* paſſe forwards, and place themſelves behind the *file-leaders*, the *Reere-halfe-files* behind the *bringers-up*. The manner you may perceive the plainer, if you note the figures of *number* which are placed on the *flanks* of the *Figure*; their *number* ſhewing the places they had from the *Front* before the *Motion* began. This *Figure* may be *reduced* either by the ſame word of *Command* which produced it, or elſe by any of the fore-going *Diviſionall Counter-martches*. Our next ſhall be a *Counter-martch* of *exchange of ground*. The words for *Command* and *Direction* follow in the next Chapter.

CHAP. LI.

Of Interchanging ground.

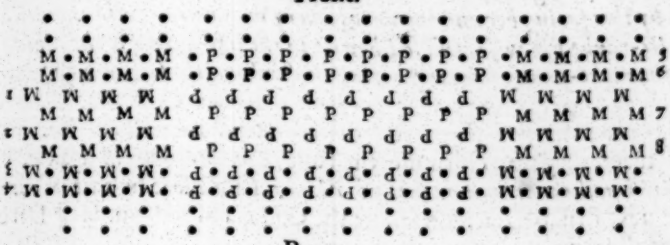
THis *Interchanging of ground*, or *Baſtard Counter-martch*, may not rightly be ſaid to be derived from any one of the particular grounds of *Counter-martch*; but rather participating of them all: And yet, conſidering it actually performed, it is different from them all. For whereas the other *Counter-martches* of *files* in *diviſion*, although they bring the *Front* and *Reere* into the *middeſt*, yet the *Front-halfe-files* continue ſtill on the ſame part, and the *Reere-halfe-files* doe not alter into the places of the other: But this, contrary to any other of the *diviſionall Counter-martches, transferres the Front-halfe-files into the ground or place of the reer-halfe-files; and them into the contrary part, bringing the file-leaders and bringers-up together into the midſt.* The following *Figure* demonſtrates the *body* in *motion*.

The Command is, *Front and Reer-halfe-files interchange ground.*

The Direction is, *Front-halfe-files, face to the Reere, then both diviſions move ſtraight forwards to the right.*

Front

Front.



Baſt. Counter-march *in motion.*

Reere.

The way to performe this *motion* is as followeth. The *Front-half-files face-about*, paſſing forward to the *right* (being led by the *bringers-up* of the *front-half-files*) between the *Intervals* toward the *reere*; The *reer-half-files* at the ſame inſtant in like manner *martching* forwards, betweene the *Intervals*, on their right hands into the *front*, untill the *front-diviſion* have attained the places of the *reere*, and they contrariwiſe the *places* of the *Front*. For the *Reducement* of this *Counter-martch*, doe as much backe againe: Or if you would *reduce* it ſome other way, you may firſt make an intire *counter-martch* of *files*, and then *counter-martch front* and *reere* into the *midſt*; for under two *counter-martches* it will not be *reduced*. Now I will paſſe to ſhew *diviſionall Counter-martches* of *ranks* or *flanks*, The firſt ſhall be *Chorean*, as in the *Chapter* following. *The reducement.*

CHAP. LII.

Of Counter-martching the flanks (or wings) into the midſt of the Battell.

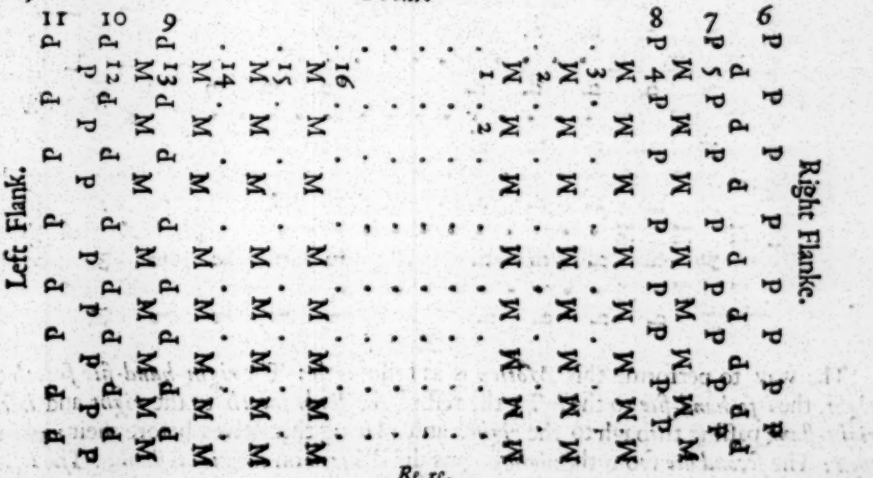
THis *Chorean counter-martch* of the *Wings* (or *flanks*) into the *midſt* is ordinarily uſed when the *Commander* would bring the light armed into the *midſt* of the *battell*, to ſecure them from the incurſions of the *Horſe*. It is a *Motion* to dangerous to meddle withall in the eye of the Enemy, although the Souldiers be expert; but by no meanes to be thought upon in the field, amongſt the untrained and unskillfull. This *counter-martch* performes the *Motion* on the ſame ground. The *Figure* followeth.

The Command is, *Counter-martch your flanks into the midſt.*

The Direction is, *Face to the Right and Left.*

Chorean,

Front.



The

The *command* being given, *the whole body faceth to the right and left by diviſion, the out-termoſt files by this facing becomming ranks, every man in the right-hand-file, being a leader to his halfe-ranke file-wiſe, and ſo likewiſe in the left-hand-file the ſame, then they counter-martch the right-flank to the right, the left-flanke to the left*, which you muſt always obſerve to doe, and your flankers will meet juſt in the *midſt* of your *Battalia*. Laſtly, having *faced* them to their *firſt-front*, the *counter-martch* is ended.

Note that upon the Counter-martching of Flanks into the midſt, the right-flank muſt always obſerve to turne to the right, the left-flanke to the left: for if they ſhould both turne off to the right, they will never meet right, if they turne both to the left, it will be as bad.

To *reduce* them, they may either uſe the ſame *Counter-martch* againe, or any of the following *diviſionall counter-martches* of *Flanks*, (unleſſe it be that of *inter-changing ground.*) The next ſhall be *Lacedemonian*: the Command and words of Direction are, as the Chapter following.

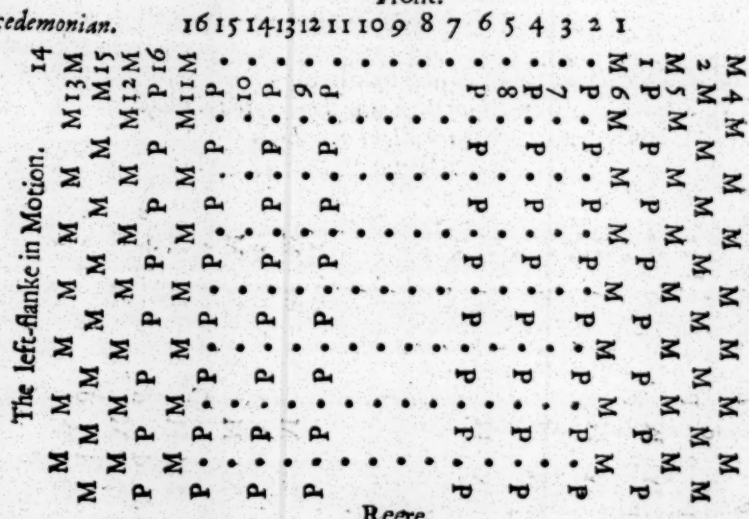
CHAP. LIII.

Of Counter-martching to take the ground on the out-ſide of the Flanks, the Aſpects outward.

THis *Lacedemonian Counter-martch of halfe-flanks or ranks, makes ſemblance of charging on and iſſuing forth upon both flanks, but leaves a large waſte diſtance of ground un-occupied between the two out-moſt Files, or midſt of the Battaile.* The Command and Figure followeth.

The Command is, *The out-moſt file of each flanke, face outward, the reſt paſſe through to the right and left, placing your ſelves before your out-ſide men.*

The Direction is, *Face to the right and left.*



The way to performe this *Motion* is as followeth: The *right-hand-file faceth* to the *right*, the *left-hand-file* to the *left*; the reſt of the *Body faceth* to the *right* and *left*, the *right-flank* paſſing through to the *right*, and placing themſelves before their *right-hand men*: The *ſecond file* from the *right* begins the *Motion* on the *right-flanke*: The *left-flank*

in like manner paſſing through to the *left*, and placing themſelves before their *left-hand-men*: The *ſecond file*, accounting from the *left*, begins the *Motion* on the *left-flank*: But you muſt note, that the *files* become *ranks* with the *facing*.

For the *Reducement* of this *Figure*, if you will firſt *face* them to their *proper-Front*, you may then command *the two in-moſt files ſtand, the reſt paſſe through to the right and left inward, and take their places*: Or, if you pleaſe, make uſe either of a *Chorean*, or a *Macedonian Counter-martch* of *Ranks* by *diviſion*, and with a *facing*, and *cloſing* their *diviſions*, they will be perfectly *reduced*. *The Reducement.*

CHAP. LIV.

Of Counter-martching to take the ground on the out-ſide of the Flanks, and to direct their aſpects inward.

THis *diviſionall* Macedonian *Counter-martch*, differeth little from the *Counter-martch* of the laſt Chapter, except it be in the *alteration* of the *aſpect*; for whereas the laſt *Counter-martch* turned the *Fronts* of each *flank* outward, this contrariwiſe directeth them inwards, cauſing each *flank* to confront the other in *oppoſition*. The Command and Figure are as followeth.

The Command is, *The out-moſt file of each flank face inward, the reſt paſſe through to the right and left, placing your ſelves behind your out-ſide men.*

The Direction is, *Face to the right and left.*

The *Motion* is thus performed: The *outer-moſt file* of each *flank faceth inward*, the reſt of the *Body faceth* to the *right* and *left outward*; thoſe of the *right-flank* paſſing through to the *right*, and placing themſelves behind their *right-hand-men*; thoſe of the *left-flank* paſſing through to the *left*, and placing themſelves behind their *left-hand-men*: The *Motion* is begun by the *ſecond file*, from each *flank*. I might here ſhew theſe *Counter-martches*, beginning their *Motion* from their *middle-moſt files*; but I am willingly ſilent, hoping that theſe may ſuffice to the curteous, not much forcing my ſelfe to give ſatisfaction to the curious. For the *reducement* of this *Counter-martch*, having *faced* them to their *firſt-Front*, you may, if you pleaſe, command the *two inner-moſt files to face outward*, *The Reducement.*

the reſt paſſe through to the right and left inward, placing themſelves behind their right and left-hand-men; which being done, the whole *Body* will ſtand *faced* to the *right* and *left outward*; then being *faced* to their *Leader*, they are *reduced*. If you would *reduce* it by ſome other way, you may make uſe either of the *Counter-march* which is next before, or of that which next followeth, or of any other *Diviſionall Counter-march* of *Ranks* (which doth not *interchange ground*:) Our next two which follow, will be *Baſtard Counter-martches*; with the which wee will conclude this our *fourth branch of Diſcipline*.

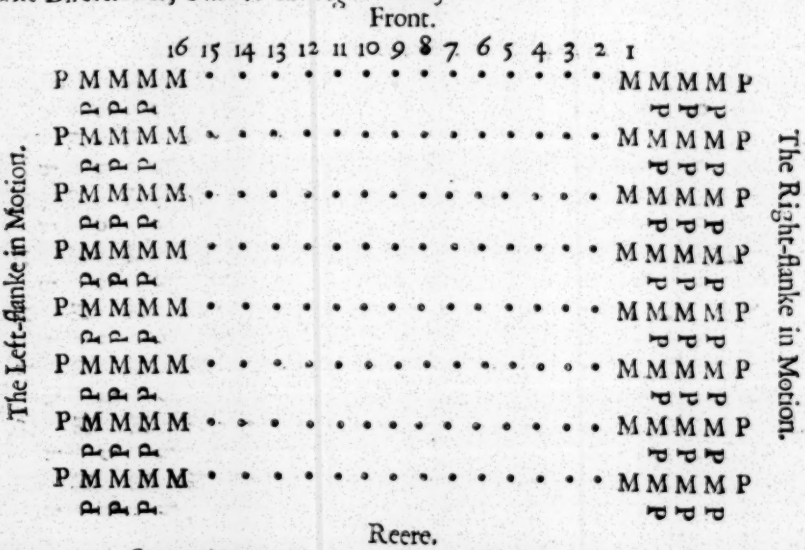
CHAP. LV.

Of taking the ground on the out-ſide of the flanke, not altering the aſpects.

THis *Diviſionall Baſtard Counter-martch produceth the ſame effect which the other two next before it wrought, onely differing in the aſpect; for the* Lacedemonian *turned the aſpect outward, the* Macedonian *turned the aſpect inward, and this keeps the aſpect ſtill directed the ſame way*. He that knowes every way, may, when time ſerves, make uſe of thoſe wayes which are moſt neceſſary and ſutable to his preſent occaſion; and the Proverb ſaith, *Knowledge is no burthen*. The *Command* and *Figure* are as followeth.

The Command is, *The out-moſt file of each flanke ſtand, the reſt paſſe through to the right and left, and place your ſelves on the out-ſide of your right and left-hand-men.*

The Direction is, *Face to the right and left.*



The way to performe this *Counter-martch* is as followeth: (According to the *Command*) the *out-moſt file* of each *flank ſtands*, the reſt of the *Body faceth* to the *right* and *left outward*, the *right-flank* paſſing through to the *right*, the *left-flank* to the *left*; thoſe of the *right-flank* placing themſelves on the *out-ſide* of their *right-hand-men*: in like manner, thoſe on the *left-flank* placing themſelves on the *out-ſide* of their *left-hand-men*.

The reducement. It may be *reduced* either by any of the fore-going *Diviſionall Counter-martches of Ranks*; or elſe, being *faced* to any of the *flanks*, then the *ranks* become *files*; and by *diviſionall Counter-martches of files*, you may *reduce diviſionall Counter-martches of ranks*; or by *ranks, files*: onely you muſt obſerve ſome *facings*. Yet for this *Figure*, if you pleaſe,

command

command the two inner-moſt files ſtand, the reſt face to the right and left inward, and ſo march into their places. The next ſhall be a *Counter-march* of *Interchanging of flanks.*

CHAP. LVI.

Of Interchanging ground by the Flanks, and bringing the inner-moſt files of Pikes to become the out-moſt Ranks.

THis *Exchanging of Flanks* is a *Baſtard Counter-march*, but differing from all the other *Diviſionall Counter-marches* of *Ranks*; for this *transferres* the *right-flanke* into the place of the *left*, and the *left* into the place of the *right*. It is very apt to receive a *Charge* from the *Horſe*; for as ſoon as they ſhall be commanded to *interchange* their *flanks*, they *face* to the *right* and *left inward*, and then the *inner-moſt files* of *Pikes* begin the *Motion*, the reſt of each *flank following orderly file-wiſe*, the *Pikes porting* ſo ſoon as they begin to *move*, and *charge* as they ſee occaſion. If need be, the *Pikes* may *charge* at the *foot*, and the *Muſquettiers give fire over them.* If any object, that the *Pikes* will have too *large a diſtance*, they may *cloſe* at their own pleaſure, ſo ſoon as they have *paſt through.* The *Command* and *Figure* are as followeth.

Note that, if you pleaſe, you may paſſe the Pikes alone thorow, and let the Muſquettiers ſtand: But then there will be a large diſtance between the Muſquettiers in the midſt.

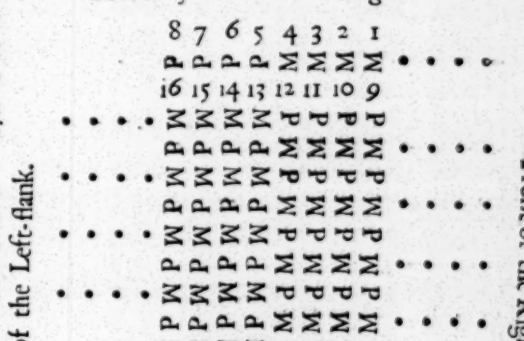
The Command is, *Interchange Flanks.*

The Direction is, *Face to the right and left inward, and march.*

For the *Reducement*, you may, if you pleaſe, *interchange ground* again: nevertheleſſe, if you would *reduce* it by ſome other way, *Counter-march* your *flanks* into the *middeſt*, and then an *intire Counter-march* either of *Rank* or *File* will *reduce* them.

I might have further enlarged my ſelfe upon this ſubject, both in *Command* and *Figure*; but it may be that ſome will find fault with theſe which I have already penned, concluding them for *nicities*, and for no *ſervice*; becauſe they cannot preſently apprehend for what uſe or ſervice they may be fit. Notwithſtanding, I would intreat ſuch (if any ſuch happen to be my over-lookers) that they would ſuſpend their cenſures, untill they have fully informed their judgements. Yet thus much I will conclude with them, that [a] *Counter-marches* might the beſt be ſpared of all the *Motions*, as being leaſt beneficiall to this our *Moderne Diſcipline:* And yet, to very good uſe many of them might ſerve, if our Souldiers were well practiſed in them. Nevertheleſſe, ſuch is the wilfull ſtupidity of the times, that many good and uſefull things are diſreputed, and accounted of no uſe, becauſe the Souldiers, wanting skill, cannot performe them as they ought; which, would the *Officers* take more paines, by often inſtructing their Souldiers, the hardeſt *Motions* would become facile and eaſie. And to ſay truth, the greateſt fault is [b] want of skill in thoſe which ſhould give inſtruction to others: and yet they will not ſtick to carp at ſuch as ſhall ſhew more than they; concluding ſuch things

Front *before the interchange.*



[a] *Counter-marches leſſe uſefull in the moderne Diſcipline. Practice brings perfection.*

[b] *The ignorant have been alwaies the greateſt oppugners and traducers of the skilfull.*

for ſuperfluous and improper, which they themſelves doe not rightly underſtand. But leſt I be taxed for digreſſion, I will conclude this Branch of *Diſcipline* with theſe few lines following.

SOme burthened are with more command then skill,
Which had they power ſuting to their mind,
You then ſhould ſee reaſon inthrall'd to will,
Nor any 'bove their knowledge ſhould you find;
For rather then they 'l ſtudy to learn better,
They wiſh all wanting, none to know a letter.

So be there many Officers in Bands,
That neither know themſelves, nor care for thoſe
That skilfull are in Poſtures, and Commands;
Nor are they careſull which end ſore-moſt goes:
They think, to dice, to drab, to ſweare and ſwill,
Is skill enough for them, learn more that will.

And if that any man more forward be,
For to inſtruct the Souldier (as is fit)
With ſuch a fellow they cannot agree;
Hee is vain-glorious, ſtrives to ſhew his wit:
They will be ſure to quarrell and deprave him,
And in their cups, perhaps, they 'l ———

Such honeſt hearts as ſpend both means and time,
To practiſe others for their Countries good,
Why ſhould this good be counted for a crime,
To thoſe that for their Prince would ſpend their blood?
That Country ſure will beſt be kept from harmes,
Whoſe Subjects pleaſure take to practiſe Armes.

But on this ſubject I 'l no longer bide,
Of Counter-martches here I 'l take my leave.
To ſhew the Wheelings next I ſhall provide,
Which followes next of courſe, as I conceive.
And though with Verſe my Counter-martches cloſe,
Beginning Wheelings, I returne to Proſe.

CHAP. LVII.

Of Wheelings, their kinds and uſes, with their ſeverall words of Command.

THe next Branch ſpringing from this *Military root*, is *Wheelings*: which are of *two kinds*, viz. *Wheelings Angular*, and *Wheelings on the Center*. Alſo be pleaſed to take notice, that all of them are either *intire* or *diviſionall*: The uſe of *intire Wheelings* is, to *turne the aſpect of the Front-proper to the right, to the left, or reere; either for the gaining of the Wind, Sunne, or ſome ſuch like advantage*; or to *confront the Enemy with their beſt Souldiers*. Moſt of the *diviſionall Wheelings*, being indeed more properly *Doublings*, either *extending* the *length* or *depth* of the Battell. Notwithſtanding, becauſe I would not be taxed with *innovation* or *alteration*, I have, according to the uſuall received way, placed them amongſt the *Wheelings*: and now I will ſhew their words of *Command* or *Direction*. But before I enter upon them, give me leave to lay down an obſervation or two, for the better inſtruction of the Souldiers in their *Wheelings*. The firſt is, *That before you enter upon your Wheelings, you cloſe both ranks and files to their Order; which is, three foot both in rank and file.* The other, *That upon all Wheelings you muſt be ſure to obſerve your Leader, and follow him, keeping your due diſtance; your Muſquettiers being all either poyſed or ſhouldred, your Pikes ought to be advanced.*

Moſt of the diviſionall Wheelings are doublings.

Note that the diſtance for Wheelings ought to be three foot between rank and file.

Note that upon the exerciſe of the Motions, whether it be Diſtance, Facings, Doublings, Counter-martches, or Wheelings, the Muſquettiers ought to be all upon one and the ſame Poſture, either poyſed or ſhouldred: the Pikes in like manner, either ſhouldred or advanced.

The words of *Command* are as followeth.

Wheele your Battell to the { *Right.* / *Left.* / *Right* } *about.* / *Left* }

Wheele

Wheele your Battell to the { *Right* / *Left* / *Right* } *about* } *on the ſame ground.*
{ *Left* }

Wheele { *Off your Front by Diviſion.*
Your Front inward to the Reere.
Front and Reere into the { *Right* / *Left* } *Flanke.*

Wheele { *Your Flanks into the* { *Front.* / *Reere.* }
Both Flanks into the Front and Reere.
Your Front and Reere into both Flanks.

Obſerve that the firſt foure *Wheelings* are *Angular*, the next foure are *Wheelings on the Center*, or more properly, on the midſt of the *Front*: But all the firſt eight be *intire*; the latter eight are all *Diviſionall*. You may alſo obſerve, that every following *Wheeling* is a *Reducement* unto that which is placed next before it; and the *Wheeling* next before may *reduce* that next following: As, to *wheele* your *flanks* into the *Front*; if you *wheele* your *flanks* into the *Reere*, it is *reduced*: or, to *wheele Front* and *Reere* into both *flanks*, if you *wheele* both *flanks* into the *Front* and *Reere*, they are likewiſe *reduced* as before. *Each following Wheeling reduceth the former.*

For the laſt eight *Wheelings*, which are *Diviſionall*, I will prick for each of them his *Figure*. As for the firſt eight, which are *Intire*, I conceive them ſo eaſie to be underſtood, that I may ſpare the labour; yet I will endeavour to expreſſe them as well as I can in words. And firſt I will begin with the *Wheelings Angular*, and then with the reſt, according to their places. And therefore note, that when you are commanded to *wheele to the Right*, or *Left*, &c. and no other command added, it is to be underſtood an *Angular Wheeling*, and ſo to be performed.

CHAP. LVIII.

Of Wheelings Angular.

The Command is, *Wheele your Battell to the Right.*

THis is an *Angular Wheeling*, which transferres the *aſpect* or *countenance* of the *Front-proper*, into that part which was the *Right-flank*: It alſo removes the *Battalia* from the *ground* whereon formerly it ſtood, and placeth it on that part before the *Front*; the *hinge* or *axel-tree* of the *Motion* is the *Right-corner-man*, or *right-hand-file-leader*, who with a ſmall *motion* moveth to the *right*, every man, the more his place is remote from the *right-angle*, the more ſwift muſt be his *motion*; becauſe his *arch-quadrant*, or *ſemi-circle*, is larger in proportion: wherefore it muſt be the diſcretion of the *Officers* ſo to inſtruct their Souldiers, that when they *wheele* to any *hand*, they may ſo moderate their *motion*, that they on the contrary *flank* be not forced to run; but ſo orderly to contain themſelves, that they may ſtill preſerve an orderly and even *Front*. For the *Reducement*, *Wheele your Battell to the left*, in the like manner as it was *wheeled to the right*: nevertheleſſe, you muſt then note, that it will not bring you back into the ſame ground you formerly ſtood on; for it hath *advanced* you the length of your *Battalia* before the place of your *firſt-Front*. But if you would be *reduced* into the *ſame place*, or *plot* you firſt ſtood on, then *face your Battell to the right*, and being ſo *faced*, *wheele your Battell to the left*, which being performed, *face to the left*, and then they are compleatly *reduced*, both for *aſpect* and *place*. The next *Command* is, 1. *Obſerve the directions for Angular Wheelings.* 2. *Note the reducement to the firſt place and aſpect.*

Wheele

Wheele your Battell to the right-about.

3 This is alſo an *angular wheeling* and *transfers* the *aſpect* of the *front-proper*, towards the *reere*: It is to be performed in the ſame manner as the *wheeling* to the *right* was; only the *motion* is twice ſo much: wherefore there ought to be the more care had, that ſo the *motion* may be orderly performed: for by ſo much as every man is neerer or further off, from the *right-corner-man*, by ſo much the more *ſwift* or ſlow muſt he continue his *motion*, that ſo he may be ſure to keep ſtill *even* in *Rank* with his *right-hand-man*. This *Motion* being thus performed, your *Battell* will be removed from its former *ſtation*, taking in lieu ther-of the ground *Diagonally* oppoſite to the *right Angle*.

Note that wheeling to the right about, will not be reduced by wheeling backe againe to the left about juſt into the ſame ground, if the wheeling be angular, but will be twice the length of the battell, removed to the right of your former ſtanding.

* 4. * To *reduce* theſe to their former *Aſpect*, *wheel* your *Battell* to the *left-about*, notwithſtanding the ground you formerly did poſſeſſe, will be twice the *length* of your *Battell* to the *left*, of your *left-flanke*; if you would *reduce* them as well to their firſt *ground*, as their firſt *aſpect*, *face* them to the *right*, and then *wheel* them to the *left-about*, which being done, face them to the *left*, and they are perfectly *reduced*, as at firſt. But the neereſt reducement of *aſpect* and *place* is; if you *wheel* to the *right-about*. Then *wheel* to the *right-about* againe for *reducement*. If to the *left-about*, then to the *left-about* in like manner.

CHAP. LIX.

Of wheeling on the Center.

The Command is, *Wheele your Battell to the right, on the ſame ground.*

5. *Wheelings on the ſame ground quicklier performed then angular wheelings, and in leſſe roome.* THis *wheeling* is by ſome called, *a wheeling on the center*; by others, *a wheeling on the ſame ground*. I cannot abſolutely maintaine it to be either, for that it onely *wheels about the midſt of the firſt ranke*. Neither may it rightly be termed a *wheeling on the ſame ground*, becauſe it loſeth ½ of the *ground* it formerly ſtood upon. This *wheeling* is quicker performed then the *angular wheelings*, and may be done in farre leſſe ground. For the *left-flanke* advanceth forward, ſtill wheeling to the *right*, the *right-flanke* contrariwiſe *facing* to the *left*; and ſo falling backward. If you have an odde File, then the *middle file-leader* muſt be the *center* or *axel-tree* of the *motion*: if you have an even number of files, then the *middlemoſt file-leader* from the left. But if your *wheeling* be to the *left*, then the contrary.

6. *The reducement.* This by ſome is called the *Prince of Orenges wheeling*. For the *reducement*, *wheel* your Battell to the *left*, on the ſame ground: and they are *reduced* as at firſt. Our next *Command* is to

Wheele your Battell to the right-about, on the ſame ground.

7. *The Reducement.* This *wheeling* is alſo a *wheeling on the Center*, or *midſt of the front*: and *transferr* the aſpect of the *front-proper* towards the *reere*, removing the Battell from the ground whereon it formerly ſtood, and placing it on the ground before the former *front*. It is performed after the ſame manner as the laſt, onely the *motion* is double ſo much as the other. In this *motion* on the *left-flanke*, every man is to obſerve his *right-hand-man*; and the *right-flank* muſt keep even after their *left-hand-men*, which become their *leaders file-wiſe*, untill they have attained their *ground*: after which, they face as before, making an *even front*. For the reducement, *wheel* your Battell to the *left-about* upon the ſame ground; and they will be reduced as at firſt. I will next ſhew the *diviſionall wheelings*, and intend to give to each of them his *figure*: wherby they may appeare the more eaſie to ſuch as doe not yet rightly underſtand them. The firſt ſhall be a *wheeling-off by diviſion*: as in the next Chapter.

CHAP. LX.

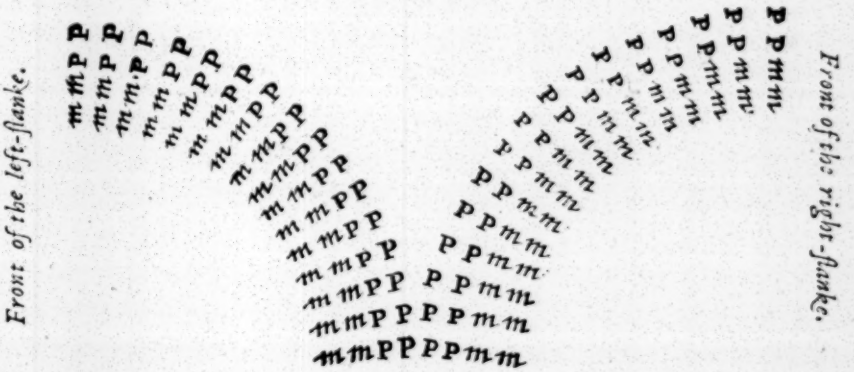
Wheeling-off the Battell by diviſion.

THis *wheeling-off by diviſion* in greater *Bodies*, may be uſefull to meet ſeverall enemies at one and the ſame time with the *Front of your Battalia*: and ſo conſequently with your

your *beſt Souldiers*. By this *motion* alſo the *Muſquetiers martching in Front*, may be *wheeled-off* by *diviſion* to *flanke* their *Pikes*: But if you would *wheele-off* your *Battell* by *diviſion*; and againe *conjoyne* them (when the *file-leaders* are come to the *reer*) then it brings all your *Muſquetiers* from the *flanks* to the *midſt* of your *Battalia*: and the *Pikes* on the *outſide* or *flanks*. If any queſtion the *depth* of the *number* of this *Figure*, I have *doubled files* to make the *Figure* more perfect, as you may perceive by the following *Figures*.

The Command is, *Wheele-off your Front by diviſion.*

First-Front.



Reere.

The way to performe this *Motion* is eaſie, for all the *file-leaders* of the *right-flanke*, *wheel-about to the right*: the reſt of each *file* following their *leaders*: the *file-leaders* alſo of the *left-flanke*, *wheeling-about* to the *left* in the ſame manner; and then *joyne* or *cloſe* their *diviſions*. This being done, if you would then *reduce* them, *wheele* them off again by *diviſion*, after the ſame manner; and they will bee as before. But if you would doe it ſome other way, make uſe of this *Wheeling* next following: which will alſo bring them as they were. The word of *Command* or *Direction* followeth as in the next Chapter.

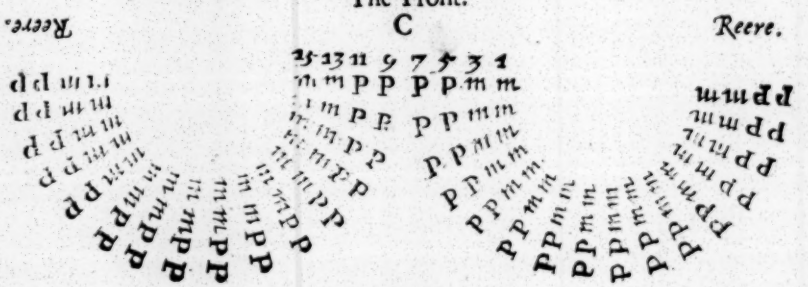
Note the direction, the wheeling is angular, the motion to be performed, wheeling-about the out-moſt file-leader on each flanke.

CHAP. LXI.

Of wheeling the Front inward towards the Reere.

WHeeling your front inwards to the Reere, is here placed as a *Reducement* unto the preceding *wheeling*: and brings the *Muskettiers* to the *flanks* againe. Nevertheleſſe if you would doe it, the Company being firſt *reduced*; then it brings the *Pikes* to bee the *flankers*. Some have conceived that it may prove uſefull at any time, when your *Reere* ſhall be too much *over-laid by the enemies Caval'rie*: having firſt gained ſome *hill-ſide*, or other place of *advantage*, for then by this *wheeling* of your *front inward* to the *Reer*, (which to the *enemy* will make ſhew of *diſbanding*, or *flight*: But to the contrary) your *Battell martcheth* towards *them* with a *ſetled* and *orderly body*, with all your *Muskettiers* in the *midſt*. In that order *firing* upon the *enemy*; the *Pikes* being the *Flanquers*: thereby *defending* the flanks or your *ſhot* from the *fury* of the *Horſe*. The *Figure* as in motion followeth.

The Command is, *Wheele your Front inward to the Reere.*



This *Motion* will hardly be well done, if your *body* hold to large an extenſion of *length*. But at what *depth* ſoever it is eaſie. The *Motion* is to be performed as followeth. The *right-hand file-leader*, with all the *leaders* of the *right-flanke advance forwards*, and ſo *wheele-about* to the *left*: every *file* ſtill keeping cloſe to their *right-hand-file*. The *left-hand file-leader* likewiſe, with all the *leaders* of the *left-flanke advance forwards*, and *wheel-about* to the *right*; every *file* of the *left-flanke cloſing cloſe to the left*. Thus the *out-moſt files* of each *flanke*, will meet and become the *innermoſt*: the *front* falling *perpendicularly* to the *reere*. For the *reducement* of this *figure*, you may if you pleaſe, either *wheel* them off to the *right* and *left* by *diviſion*: or elſe *wheel* your *front inward* againe to the *reere*. Theſe two laſt *wheelings* have been demonſtrated with their *files doubled*, wherby the *figures* might be the more perfect, but with men it would have been needleſſe: wherfore *double ranks* to the contrary *hand*, and they will be as at the firſt.

The inſtruction how to performe the Motion.

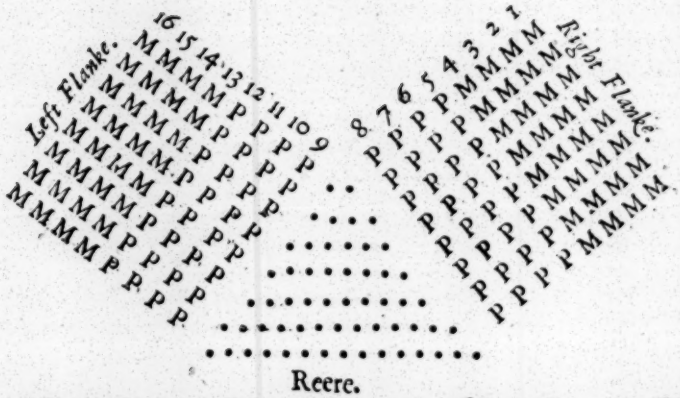
The reducement.

CHAP. LXII.

Of bringing the Flankes into the Front of the Battell.

The Command is, *Wheele your Flanks into the Front.*

The Direction is, *Follow your Leaders.*



Wheel your { Flanks / Wings / Front } into the { Front. / Front. / Battell. } Wheel your { Front / Front / Reere } into the { Midſt. / Center. / Flanks }

This

THis *Diviſionall Wheeling of the Flanks into the Front*, is properly a *Doubling*, performed by *wheeling*. It brings all your *Muſquettiers* from the *Flanks* into the *Front*. So that whereas this *Body* before could doe *execution* but with eight *Muſquettiers* at once, by this *Motion* they may poure on ſixteen *ſhot* together. If they were *deeper* before the *Motion* began, then it would bring the more hands to imployment. If upon ſome *paſſe* you ſhould be chaſed in the *Reere* by *Horſe*, by this *Motion* of *wheeling* your *flanks* into the *Front* you not onely ſecure your *Muſquettiers*, but alſo *barricado up* the *paſſage* with your *Pikes*; provided it be not above fifty foot over. Some call this a *wheeling on the Center*; becauſe they *wheele-about* the *middle-men* of the *Front*. But I rather conceive it an *angular*; becauſe, upon the firſt *motion* of *dividing*, every *Diviſion wheeleth about* his own *angle*, untill the *out-moſt file leaders* of each *flank* meet together in the *midſt*. You may perceive how, by the figures of *number*, where the figure 1 meets the *number* 16, 2 with 15, 3 with 14, and ſo for all the reſt. Then, being *faced* to their *Leader*, every two *files* that meet, being now *joyned*, make one *rank*. There muſt be the like *order* and *decorum* kept in the *motion* of *wheeling* each *flank*, as I ſhewed in the inſtruction of *intire angular wheelings*. For *Reducement* of this *Motion*; *Wheele your flanks into the Reere*. Or elſe foure times the ſame; as I have ſeen ſome doe: although ſomewhat the further way about. Divers men are diverſly opinionated, concerning the beſt *word* of *Command* or *Direction* for this *Motion*: Theſe I have known uſed, which I have placed at the bottome of the *Figure*. And if any man like one better then the other, be it at his owne choice, either to uſe or refuſe, while I paſſe to ſhew the next *Wheeling*.

This Wheeling muſt properly a Doubling.

Sixteen abreſt allowing to each man 3. foot amounts to 48 foot.

The diſcacement.

CHAP. LXIII.

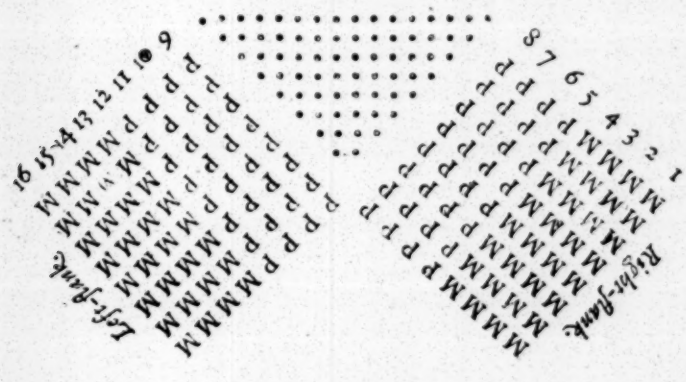
Of wheeling the Reere into the midſt of the Battell.

The Command is, *Wheele your Flanks into the Reere.*

The Direction is, *Face all about to the right, and follow your preſent leaders.*

Wheele your { Flanks / Wings / Reere } into the { Reere. / Reere. / Battell. } Wheele your { Reere / Reere / Front } into the { Midſt. / Center. / Flanks. }

First-Front.



Front-accidentall.

THis *Diviſionall wheeling* of the *Flanks* into the *Reere*, is alſo a *Doubling*, and performed as the other. And whatſoever might be ſaid in the behalfe of the *wheeling* of the

Upon all wheelings you muſt obſerve to follow your leaders; which muſt be underſtood, as well of thoſe which become leaders accidentally, (by reaſon of their rigs) as of thoſe which be the firſt & proper leaders. As in this wheeling for example, where the bringers-up are become the leaders of the motion.

Front into the *middeſt*, the ſame may be alſo ſpoken concerning the *wheeling* of the *Reere* into the *middeſt*: For this *Wheeling* brings your two *out-moſt files* to be the *firſt-rank* to the *Reere*; the *Bringers-up* of the *right* and *left-hand-files* meeting together: the *Bringers-up* of the *right-flank* meeting *face* to *face* with the *Bringers-up* of the *left-flank*. And ſo being *faced* to their *Leader*, they which before were compleat *files*, are now become *halfe-ranks*, either to the *right* or *left*. But you muſt note, that before you begin to *wheel*, you muſt *face* your *Body about* to the *Reere*; and then the *action* will be all one as if you *wheeled* your *flanks* into the *Front*. Wherefore I ſhall not need further to explaine it, having ſpoken fully to it in the precedent Chapter.

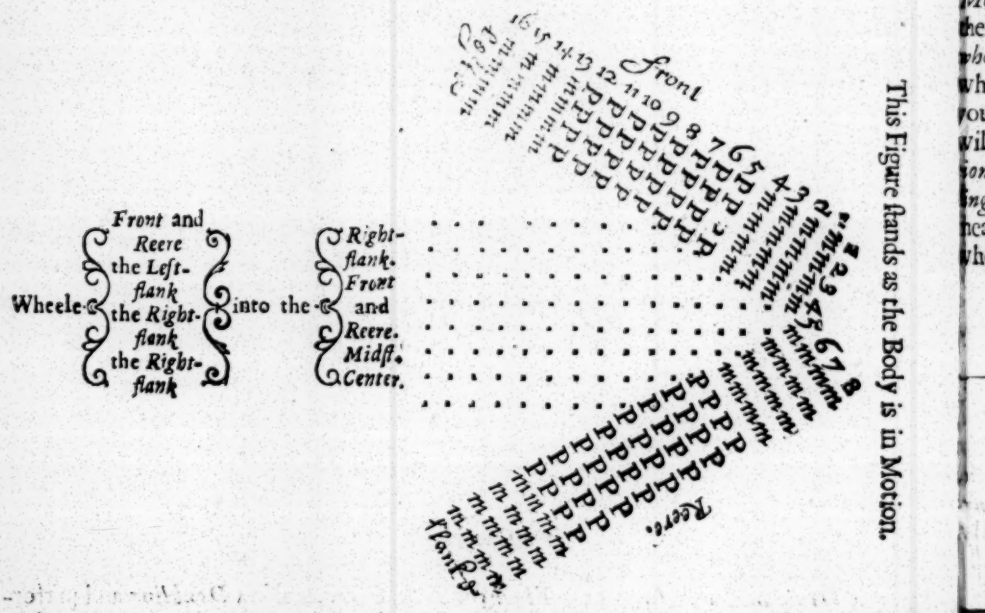
Note that the two middle-moſt Bringers-up are the hinges of this wheeling.

For the *Reducement* of this *Wheeling*; the *Commander* being at his *Front-accidentall*, may command them to *wheele* their *wings* into the *Reere*, and ſo paſſe through to that part where his *proper file-leaders* are; and then *face* them to him, and they are *reduced*. Or elſe, when hee hath paſt through to the *Reere*, and *faced* his *Company* to him, then his *Pikes* being fore-moſt, let him *wheele* his *flanks* into the *Front*; when being *faced* to their *Leader*, they are *reduced*. For this *Motion* there are alſo divers and ſeverall *words* of *Command*; And becauſe it may be, that ſome will better approve of ſome of the other *words* of *Command*, then of this that I have made uſe of, therefore I have placed others immediately before the *Figure*, that ſo any that will may take their choice, while I paſſe to ſhew the next *Wheeling*: Whoſe *word* of *Command* and *Direction* you ſhall find over the *Figure* of the next Chapter.

CHAP. LXIV.

Of wheeling the right-flank into the midſt of the Battell.

The Command is, *Wheele Front and Reere into the right-flank.*
The Direction is, *Face all to the right.*



This Figure ſtands as the Body is in Motion.

This

THis *Diviſionall wheeling* of the *Front* and *Reere* into the *right-flanke*, doth *quadruple* the *depth*; as may appeare by this *Figure*; which before the *Motion* began contained but 8. in *depth*, but this *wheeling* being perfected, makes them 32. namely, if you direct the *aſpect* of the *Body* either to the *right* or *left*, after the *Motion* is ended. If you obſerve this *Wheeling*, it doth divide the *Muſquettiers* on the *left-flanke*; the one halfe of them *wheeling* to the *Front*, the other halfe to the *Reere*: all the *Muſquettiers* of the *right-flank wheeling* together into the *midſt*. The *Pikes* are likewiſe divided; thoſe that were the *Front-halfe-files* are in the *middeſt* of the *Front-diviſion* of *Muſquettiers*, and thoſe which were the *Reere-diviſion* of *Pikes* are in the *middeſt* of the *Reere-diviſion* of *Muſquettiers*. This *Wheeling* may be to ſingular good uſe for the making of ſome *formes* of *Battell*. But I forbear now to treat concerning *Figures* and *formes* of *Battell*, reſerving them to be ſpoken of in their due places; and come now to ſhew the way how to performe the *Motion*. The *Command* therefore being given to *wheele Front and Reer into the right-flanke*, then the firſt thing the Souldiers are to doe, is to *face* to the *right*; that done, they *wheele* together about the 4. and 5. men in the *right-hand-file*; which is the *halfe-file-leader* to the *Front*, and *halfe-file-leader* to the *Reere*. You may eaſily perceive how by the *Figure*; where the *Reere-diviſion wheeleth* to the *left*, and the *Front-diviſion* to the *right*, untill the *Bringer-up* of the *right-hand-file* meets in the *midſt* with his *file-leader*: the *ſecond* with the *ſeventh*; the *third* with the *ſixth*; the *fourth* with the *fifth*, &c.

Note that if the length of your Battell be double the number of your depth, as in this Figure, then this wheeling of Front and Reere into the Right or Left-flank, doth quadruple their former depth. If the number were equall in length and depth, then by this wheeling they would be but doubled. If the number of your length exceed more then double your depth, by ſo much the more will the extenſion of the depth be beyond quadruple, &c.

For the *Reducement* of this *Figure* of *Wheeling* there are many wayes, according as the *Body* may be *faced*: But firſt conceive them *faced* the ſame way as they were before this *Motion* began; and then the *wheeling* of *Front* and *Reere* into the *left-flank* will *reduce* them, when they are *faced* to their *Leader*. Or, if you will, *face* them that way which they *wheeled* in the *Motion*, which was to the *right*; then *wheele your flanks* into the *Reere*; when being *faced* to their *proper-front*, they are *reduced*. And ſo, in like manner, ſhould you *face* them to ſome other part, they might be otherwiſe *reduced*. The next *Wheeling* will be the ſame to the *left*, as this is to the *right*; where, notwithſtanding that the *Motion* be all one, yet it ſhall differ in the *placing* of the *men*. For before I begin the *Wheeling*, I will paſſe through all the *Muſquettiers*, from the *right-flank* to the *left*; by which meanes, the *Body* will ſtand as appeareth by the *ſquare Figure* following under *A*. From whence I will begin the next *Wheeling*.

The Reducement.

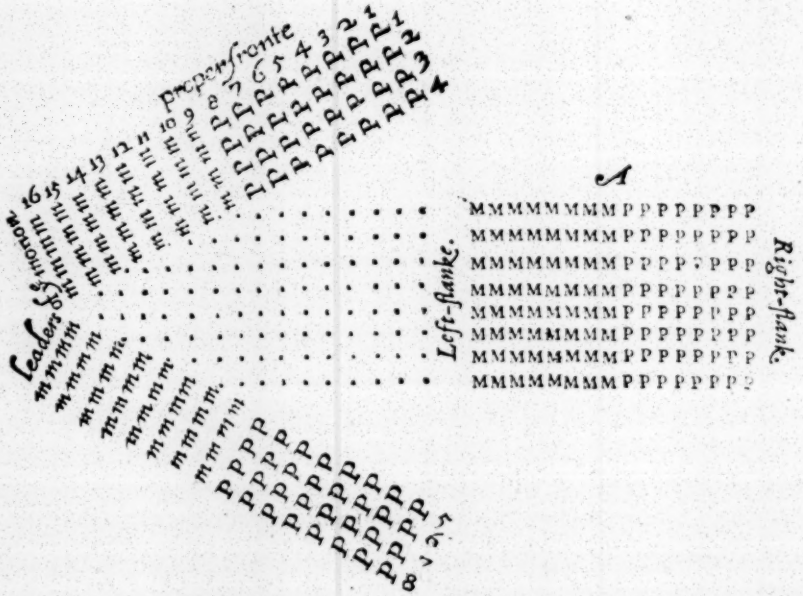
Wheelings may be diverſly reduced, at the diſcretion of the Commander.

CHAP. LXV.

Of wheeling the Left-flank into the midſt of the Battell.

The Command is, *Wheele Front and reere into the Left-flank.*

The Direction is, *Face all to the left, and move after your preſent leaders.*



THis *Diviſionall wheeling* of the *Front* and *Reere* into the *Left-flank*, is in like manne a *Doubling of the depth*. For the nature of the *Motion*, it is altogether like unto th *Wheeling* next before; differing onely in the *Flank*; and after that the *Body* is *faced* t the *left*, the *wheeling* is to be performed as *wheeling* the *Flanks* into the *Front*. But b reaſon that before the *Motion* began all the *Pikes* were on the *right-flanke*, by this *whee ling* they are brought to the *Front* and *Reere*. For the *aſpect* being direct d the ſame wa it was before the *Command* was given, the *depth* will be 32. as in the other *Figure*.

The reducement. For *Reducement*, the ordinary way is to *wheele* the *Front* and *Reere* into the *right-flan* Or if upon any occaſion you have *faced* your *Body* to the ſame way they have *wheele* (which was to the *left-flanke*) and would give your *Command* from thence, then let the *wheele* their *flanks* into the *Reere*. This done, the *Commander* paſſing to his *firſt-Fron* and *facing* them to him, they are as before this laſt *Wheeling* began. Then cauſe the *fou files* of *Muſquettiers* to *face* to the *right*, and to paſſe through to their places. Laſtl doe but *cloſe* them to their due *diſtance* in *rank* and *file*, and they are perfectly *reduced*.

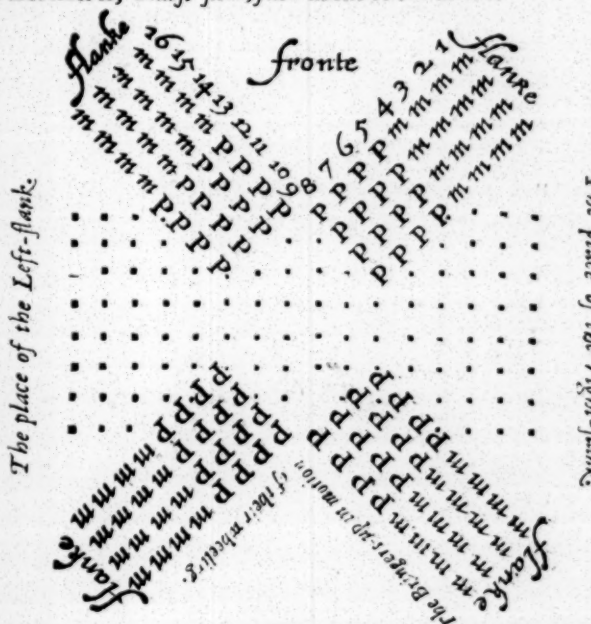
CHA

CHAP. LXVI.

Of wheeling Front and Reere into the midſt of the Battell.

The Command is, *Wheele both Flanks into the Front and Reere.*

The Direction is, *Halfe-files, face-about to the Reere.*



THis *diviſionall wheeling* of both *flanks* into the *Front* and *Reer*, doth *double* the *depth*; making them from 8. *deep*, 16. It doth likewiſe transferre the *Muſquettiers* from the *flanks* into the *Front* and *Reere*; making a *diviſion* between the *Front-halfe-files* and *Reere-halfe-files*: So that of one *Body*, *flanks* with *Muſquettiers*, it maketh two; each having their *Muſquettiers* in *Front*.

This *Figure*, and moſt others, (as well *Facings*, *Doublings*, *Counter-marches*, and *Wheelings*) are here ſet forth as the *motion* of each preſents it ſelfe in the *execution*; few of them being ſhewen as they be when they are *executed*: And I conceive it the better way, not only for *direction*, but alſo for the *apprehenſion* of the Learner, to ſhew the work as it is in *doing*, rather then abſolutely *performed*.

For the way how to performe this *wheeling*, take theſe directions following. The *Command* being firſt given, as afore-ſaid, the firſt thing the Souldiers have to doe is, for the *halfe-files to face-about*, and then the *Front-halfe-files* and *Reer-halfe-files wheele* at one and the ſame time; the *Front-diviſion wheeling* about their two *inner-moſt file-leaders*, which are figured with the numbers of 8. and 9. untill the *file-leaders* of the *right-flank* meet together in the *midſt* with the *file-leaders* of the *left-flank*: as you may eaſily perceive by the Figure ſhewing the *motion*; the reſt of their *diviſions* orderly following them. The *halfe-files* alſo being *faced about*, the *Bringers-up* in like manner *wheele* together; being now the *leaders* of the *motion*, in the *Reere*, as you may perceive. This being done, if you pleaſe, you may *face* them all to their *Leader*, (whom ſuppoſe to be at the *place* of his *firſt-front*,) and then command them to *cloſe* their *Diviſions*; which being performed, all your

The direction to this wheeling.

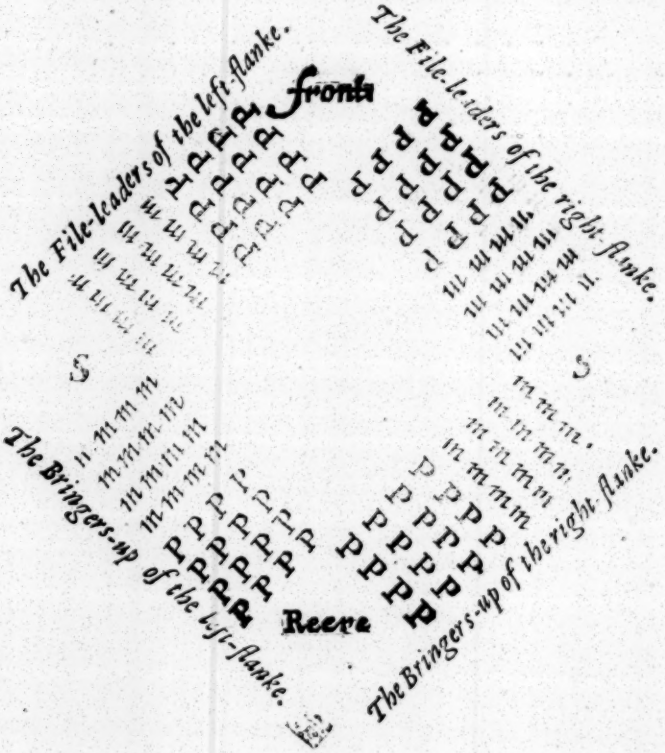
your *file-leaders* are in the two *inner-moſt files* of the *front-diviſion*, *file-wiſe*, and all the *bringers-up* in the *reer-diviſion* of the ſame *files*.

For the *reducement* of this *wheeling*, if you will, *face* them to either of the *flanks*, and command them to *wheele* both *flanks* into the *front* and *reere*, then *face* them again to their *proper-front*, and cloſe their *diviſions*, they will be as at firſt. But if you would make uſe of ſome other *wheeling*, to *reduce* it, then take this in the following Chapter.

CHAP. LXVII.

Of wheeling the flanks into the midſt of the Battell.

The Command is, *Wheele front and reere into both flanks.*
The Direction is, *Face to the right and left, and wheel after your preſent leaders.*



THis *diviſionall wheeling* of the *front* and *reere* into both *flanks*, may alſo be termed *doubling of the depth*: by reaſon that from 8. *deep*, *it maketh double the former number*. By this *motion* alſo, the *Muskettiers* which were before *flankers*, are now transferred into the *midſt*, betweene the *front* and *reere* of the *Pikes*. And whereas in the other *figure*, the *wheeling* was about the two *middle-moſt file-leaders*, and *bringers-up*; this *wheeling* contrariwiſe, is about the two *halfe-file-leaders*, of the *out-moſt files* on each *flanke*. In the other *wheeling*, the *file-leaders* and *bringers-up* made the *innermoſt files*, in this the *outermoſt*

outer-moſt file of each *flank*, as you may eaſily perceive by the *figure*. This *motion* being performed, leaves a large *Intervall* (or *diviſion*) from *front* to *reere*, between the *flanks*: if the Commander paſſe into the *midſt*, between each *diviſion*, and *face* them all to him; cauſing them to *cloſe* their *diviſions*, and march forth into his firſt place, (directing their *aſpects* the ſame way) then will the *Pikes* be in the *front* and *reere*.

The Reducement.

For the *reducement* of this *Figure* (of *wheeling*) to its former *poſture*; you may *face* the *body* to one of the *flanks*. Which being done, command them againe to *wheel front and reer into both flanks*, when being *faced* to their former *front*, and having *cloſed* their *diviſion*, they are reduced. Nevertheleſſe if you would make uſe of ſome other *wheeling* to *reduce* them, then *wheele both flanks* into the *front* and *reere*, and they will be as at firſt, after that they have *faced* to their *Leader*, and *cloſed* their *diviſions*. Thus as briefly, and as plainly as I could, have I run through the ſeverall *motions* and *grounds*, for the *diſciplining* of a *foot-company*. And although I neither can, nor hope to give ſatisfaction to all; yet I ſhall intreat the better qualified, that where I am wanting, there they will ſupply my defects with their goodneſſe. Or if it ſo happen, that I undergoe the cenſure of needleſſe ſuperfluity: I would have ſuch to make uſe of ſo much of it, as they ſhall thinke fit for their owne turnes, and leave the reſidue unto ſuch as may have opportunity for to uſe it.

THus courteous Reader have I paſt the grounds,
And various motions of the Infantery,
Where thou muſt gaine the skill, caſt others wounds,
Though from a young ove of th' Artillery.
Read and conſider, if thou nothing gaine,
I aske as little from thee for my paine.

If thou the Diſtances doſt well peruſe,
The ſeverall Facings, and the Doublings too,
The Counter-marches which of courſe enſues,
And then our Wheelings which we laſtly do:
Theſe being practiſ'd, learnd, and underſtood,
The benefit turnes to thy Countries good.

Yth ſe like the Vowels are in number five,
With which we ſpell all words that can be nam'd:
So with theſe motions we all formes contrive,
And from theſe grounds are all our Figures fram'd.
Then frame thou no excuſe, but lewne to know them.
And with as free an heart as I doe ſhow them.

Now next of all I ſhould ſome firings ſhow,
But leſt perhaps I hold you over-long,
I thinke it fit ſome reſpite to beſtow,
For feare our Souldiers thinke I doe them wrong.
So pleaſe the Reader but to paſſe the whiles,
And ſee our Leaders exerciſe their ſles.

For now each Leader is ſo courteous growne;
He ſtrives to bring another to his place,
But they as modeſtly would keepe their owne,
And each prefers his fellower to the grace.
So pleaſe you then but winke at the digreſſion,
And you ſhall ſee each Leader by ſucceſſion.

CHAP. LXVIII.

Of making men file-leaders ſucceſſively, the files being eight deepe.

EVery Man may be made *file-leader* of his owne *file ſucceſſively*, according to his *firſt ſtanding*, as well and eaſily in *great bodies*, as by *ſingle files*. Yea and with the ſame words of Command and Direction, as you may perceive by the following Table, where the Figures of *number* ſhew the ſucceſſion of each mans *leading*. The words of *Command* which produce each *leader*, being placed in the Columes of the following Table. In the firſt Colume, the *file* ſtands each man in his right place; with his *proper file-leader* in *front*. The reſt of the *files* demonſtrating the *places* of the men, according to their *ſtanding* upon the making of every ſeverall *file-leader*. The *Commands* are *figured*: which produce the like *leaders*.

The Front of each file as they come to be file-leaders successively, with the numbers and places of the men, figured according to their proper places they first stood in.

8	7	6	5	4	3	2	1
7	8	5	6	3	4	1	2
6	5	8	7	2	1	4	3
5	6	7	8	1	2	3	4
4	3	2	1	8	7	6	5
3	4	1	2	7	8	5	6
2	1	4	3	6	5	8	7
1	2	3	4	5	6	7	8

The severall words of Command, which produce each File-leader.

1	8	7	6	5	4	3	2
Then face about, or Counter march the front into the Reere, and they are reduced.	Ranks, } to the Left double } makes the Files,	Counter-march Front and Reere into the middle, and then face to the first } makes the Front,	Ranks } to the Right double, makes the Files }	First Rank stand still, the rest passe thorow to the left, and place your selves before } makes the your leaders,	Ranks } to the Left double, } makes the Files }	File-leaders, and half-file leaders stand; the rest passe thorow to the right, and } makes the place your selves before your Leaders. }	Ranks } to the right double } makes the Files }

The first are the *proper leaders* of the *files*. For to make the second *leade*, if there be but one *File*, then, *file, ranke two to the right*; if there be more *files*, then, *ranks to the right, double*, and *files to the right, double*. By which meanes the second man is become *leader* of his *file*; every man being disposed, as you may perceive by that *file*; whose *leader* is the *figure* of 2. To make him that was the third man, *leader*, let *file-leaders and half-file-leaders stand*, and *the rest passe through to the right, and place themselves before their leaders*. Thus will the *file* stand like that, led by the *figure* of 3. For to make him that was the fourth man *leader*;

leader; *Ranks to the left, double*; and, *files to the left, double*: whereby the *file* will ſtand like that led by the figure of 4. For to make him that was the fifth man *leader*, let the *firſt rank ſtand*; *the reſt paſſe through to the right, and place themſelves before their leaders*: by which means, the *file* will ſtand like that led by the figure of 5. For to make him that was the ſixth man *leader*, *Double your Ranks to the left*, and, *Files to the left, double*: and then the *file* will ſtand like the *file* led by the figure of 6. For to make him that was the ſeventh man *leader* of the *file*, *Counter-martch Front and Reere into the middeſt*, and *ſuce them to the former Front*: whereby the *file* will ſtand like that led by the figure of 7. For to make him that was the eighth man *lead* the *file*, *Ranks to the left double*, and, *Files to the left double*: and the *file* will ſtand like that led by the figure of 8. For to *reduce* them, *Cauſe the firſt-rank to ſtand, the reſt to advance forwards to the right, placing themſelves before their leaders*. *The Reduſement.*

CHAP. LXIX.

Of making men File-leaders ſucceſſively, the Files being but ſix deep.

SOme will be inquiſitive to know for what uſe the *making of File-leaders by ſucceſſion* ſerveth; or whether it be not a meere Curioſity? To which I thus anſwer: That it is not onely *pleaſant*, but *profitable*. *Pleaſant* to the *leader* of a *file*, who having ſufficiently exerciſed his *file* in *Poſtures*, to give ſome time of reſpite or delectation for the recreating of their (almoſt) tired ſpirits, brings each man, *ſucceſſively*, to *lead* the *file*, by *proper words of Command*: And laſtly, *reduceth* each man to his *former ſtanding*. It muſt needs be profitable, and much available in *Diſcipline*, when the skilfull *Commander* can thereby (with much eaſe) *change* and *interchange*, bring what *ranks* hee pleaſeth to *lead* in *Front*, and *exchange* them afterwards for others; yea, and laſtly, at his owne pleaſure, bring the *proper File-leaders* againe into their places. This following Table ſhewes each mans ſeverall place, and how they ſtand upon every mans comming to be made *File-leader*; ſtill ſuffering alteration, according to their various *leaders*; demonſtrated here by the figures of *number* (which are placed at the bottome of thoſe Columnes wherein are writ the *words* of *Command*:) Underſtand that thoſe words over the figure of 2. are to make the ſecond man *File-leader*; thoſe words over the figure of 3. make the third man *leader*: And ſo forwards to the reſt, as in the Table.

The Front and ſtanding of each File as they come to be Leaders.

6	5	4	3	2	1
5	6	5	2	1	2
4	3	1	6	4	3
3	4	6	1	3	4
2	1	2	5	6	5
1	2	3	4	5	6

The words of Command which produce each ſeverall Leader.

2	Ranks, Files, } to the left double.
3	Halfe-files, double your Front to the right, and files to the right double.
4	File-leaders ſtand; the reſt paſſe thorow to the right, and place your ſelves before your leaders.
5	Rankes to the left double, and files double your depth to the left.
6	Ranks, Files, } to the right double.
1	File-leaders ſtand; the reſt paſſe thorow, and place your ſelves before your leaders.

The *firſt man* is the *leader* of the *file*. For to make the *ſecond man* leader, Command, *File, rank two to the left*. If there be more *files* than one, *Ranks to the left, double*; and *files to the left, double*: which makes the *ſecond man* leader; every man in the *file* being diſpoſed, as you may perceive by that *file* led by the figure of 2. For to make him that was the *third man* leader, Command, *Halfe-files, double the Front to the right*; and, *Files to the right, double*: by which means, the *file* will ſtand like that led by the figure of 3. For to make him that was the *fourth man* leader; *Face to the Reere*, and then hee leads. But if you will keep the ſame *Front*, command the *firſt-rank to ſtand, the reſt to paſſe through to the left, placing your ſelves before your leaders*: Thus will the *file* ſtand like that led by the figure of 4. For to make the *fifth man* leader, command, *Ranks to the right, double*: and, *Files to double their depth to the right intire*: by which meanes, the *file* will ſtand like that led by the figure of 5. For to make the *ſixth man* file-leader, cauſe *Ranks to the left, double*; and *Files to the left, double*; and then the *file* will ſtand like that led by the figure of 6. For to *reduce* them, there needs no more but, *Face to the Reere*: notwithſtanding, if you would have the *Front* the ſame way, the Command is, *Firſt-rank ſtand; the reſt paſſe forwards to the right, placing your ſelves before your leaders.*

The reducement.

For to make ſix men ſucceſſively Leaders, by ſix words of Command, beſides Facings.

The firſt is *leader*: For the ſecond file, *Rank two to the left*, and, *Files to the left, double.*

For

For the third, *Counter-martch Front and Reere into the midſt, and face to that part which was the Reere.* For the fourth, *Face-about to the right.* For the fifth, *Counter-martch Front and Reere into the midſt, and face to that which was the Reere.* For the ſixth, *File, rank two to the right*, and, *files to the right, double. Face them about*, and they are *reduced.*

CHAP. LXX.

Of making men File-leaders ſucceſſively, according to their precedency and dignity in file.

HAving already demonſtrated two Tables, for the making of men *File-leaders ſucceſſively*, let it not be held impertinent if I preſent two others unto you; wherein I ſhall deliver the way of making men *File-leaders, according to dignity.* Snarling Cynicks, I know, will *carp* at my *curioſity*; but *ſtudious Souldiers* will *praiſe* my *induſtry.* Men naturally are not inclined to practiſe any thing, wherein they find not either profit or delight: few men by the *practice* of *Armes* makes * profit. If then the *aimes* of *honour* may be firſt attracted, with the various delights which are found in the ſtudy and practice of the *Art Military*, why ſhould any grutch the gilt to the wholeſome Pill, (which makes it the more readily and willingly received?) Or, why ſhould any hinder the meanes, whereby *Souldiers* may be built up with delight, ſeeing that the benefit redounds to the reputation and honour of our Countrey? Thus much upon mine own knowledge: I have ſeen ſome ſo prepoſterous to all conceit of *Souldiery*, that they have ſhunned it with as much care as thrifty husbands doe beggery; yet caſually happening to ſee the *exerciſe of a ſingle file*, have been ſo taken with ſome conceit or knack, that without any further aime, they have taken *Armes*: wherein, by their *practice* and *induſtry*, they have attained ſo much *proficiency*, that now they are known excellent in many parts of the *Art Military.* Nor hath their flowring buds been any way priviledged, or might eſcape thoſe private and froſty nips from aſperſionating tongues; a fault too common and cuſtomary in many, to deſpiſe the vertue of thoſe, whom they have known raw novices in that *art* and *faculty*, wherein themſelves have been noted any thing extraordinary. But leſt I be cenſured to be over-tart or tedious, I return to the worke of this Chapter: which is, *the making men file-leaders in dignity.*

* *What ſortunate profits Souldiers have made by following this Art, read* Rawleighs *Hiſt. of the World, l. 5. c. 6. Sect. 2.*

Each mans *dignity* and *worth*, with the reaſons thereof, are at large ſet forth in the *fourth* and *fifth* Chapters of this Booke. The *Table* followeth, wherein is declared every mans *dignity*, and the words to make them *file-leaders* accordingly, &c.

File-leaders by Dignitie.

The proper file-leader.	The bringer-up.	The half file-leader.	The bringer-up of the front-half file.	The second man from the front.	The next after the half file-leader.	The third man from the front.
1	2	3	4	5	6	7	8
5	6	7	8	1	2	3	7
3	4	5	6	7	8	1	2
7	8	1	2	3	4	5	6
8	7	6	5	4	3	2	1
7	6	5	4	3	2	1	8
4	3	2	1	8	7	6	5
3	2	1	8	7	6	5	4
1	8	7	6	5	4	3	2
2	1	8	7	6	5	4	3
5	4	3	2	1	8	7	6
6	5	4	3	2	1	8	7

The severall words of Command, which produce each File-leader.

0	8	7	6	5	4	3	2
The words of Command, to reduce them to their former places, are placed beneath this table.	Halfe-files, double your front to the left, then files to the left double.	File leaders, and half-file-leaders stand; the rest passe thorow to the right; placing your selves before your leaders.	Rankes to the left double; then, files double your depth to the left.	Front and Reere halfe-files interchange your ground.	Bringers-up, double your front to the right, and files to the right double	File leaders, and half-file-leaders stand; the rest passe thorow to the left, and place your selves before your leaders	File-leaders stand; the rest passe thorow to the right and place your selves before your leaders.

The Reducement.

1. Front and Reer-halfe-files interchange ground.
2. Rankes to the right double.
3. Bringers-up face-about to the left, and march into your places.

A. 1. *File-leader.*
B. 2. *Bringer-up.*
C. 3 *Half-file-leader.*
D. 4. *Bringer-up of the front-halfe-file.*
E. 5. *The second man from the front.*
F. 6. *The next before the bringer-up.*
G. 7. *Next after the halfe-file-leader.*
H. 8. *The third man from the front.*

The *file-leader* is the A. *chiefest man in dignity*, and *first leader* of the *file*. To make the B. *second man in dignity file-leader*, (command) *file-leaders stand, the rest passe through to the right, and place your selves before your leaders*. To make the C. *third man in dignity file-leader*, (command) *file-leaders, & half-file-leaders, stand; the rest passe forwards to the left, and place your selves before your leaders*. To make the D. *fourth man in dignity file-leader*, (command) *bringers-up, double your front to the left*, and (that being done) *files to the left, double*. To make the E. *fift man in dignity file-leader*, (command) *front and reer-halfe-files interchange ground*; and then *face* as before. To make the F. *Sixe man in dignity file-leader*, (command) *fil, ranke two to the left*, (if it be a *single file*: but if you have more *files*, then command, *ranks to the left double*) and *files double your depth to the left*. To make the G. *Seventh man in dignity file-leader*, (command) *file-leaders*, and *halfe-file-leaders stand; the rest passe forwards to the right, placing your selves before your leaders*. To make the H. *Eighth and last man in dignity file-leader*, (command) *halfe-files double your front to the left*. (That done,) *Files to the left, double*. This being performed, every man hath successively been the *leader* of his owne *file*, according to his *dignity* therin. The *reducement* is placed at the lower end of the *table*.

CHAP. LXXI.

Of making men file-leaders by dignity, the files being but sixe deepe.

MAny wayes there bee to make men *file-leaders*, either *successively*, or by *dignity* in one *single file*; which cannot so easily (nor so properly) be performed with a whole *company* (or *larger body*) and therefore neither proper nor *usefull*. Such waies onely being *fit* to be *practised*, as will suite with any number, the *depth* onely *reserved*, which

which I have here under-taken for sixe *deep*. The following *Table* demonstrates their *Number of dignity*, and the *succession* of *each mans* comming to *lead* in *Front*; as also *each mans place* upon the *alteration* of every *leader*, and *severall word of Command*. Beneath each Columne is placed the *words of Command*, to produce the next *ensuing leader*. Last of all is the *Reducement*.

Succession of leading in Dignity.

6	5	4	3	2	1
2	4	5	6	6	5
1	3	1	2	3	4
3	1	3	4	1	3
4	2	6	5	5	6
5	6	2	1	4	2

Number of Dignity.

The words of Command which produce each File-leader.

1	6	5	4	3	2
The words of command to reduce them are at the end of this Table.	File-leaders stand; the rest passe thorow to the left, and place your selves before your leaders.	Ranks to the right double; and Files to the right double.	Front and Reere-halfe-files interchange ground.	File-leaders and halfe-file-leaders stand; the rest passe thorow to the left, and place your selves before your leaders.	Bringers-up, double your Front to the right; Files, double your depth to the right.

The Reducement.

Ranks to the Left } double.
Files to the Left }
Halfe-files, double your Front to the Right.
Bringers-up, face-about to the Right, and march forth into your places.

Although the *Table* it selfe were sufficient to instruct the desirous, yet for the clearer demonstration, take these further instructions.

A. The *first-ranke*, or the *file-leaders* of each *file* are the *first* and *chiefest men in dignity*; every one in his owne *file*. A. *The file-leaders.*

To make the B. *second-rank in dignity file-leaders*, (Command) *Bringers-up, double your Front to the Right*; (and then) *Files, double your depth to the Right*. B. *Bringers-up.*

To make the C. *third-rank in dignity file-leaders*, (Command) *File-leaders and halfe-file-leaders, stand; the rest passe through to the left, and place your selves before your leaders*. C. *Halfe-file-leaders.*

To make the D. *fourth-rank in dignity file-leaders*, (Command) *Front and Reer-half-files, interchange ground*. D. *Bringers-up of the Front-half-files.*

To make the E. *fifth-ranke in dignity file-leaders*, (Command) *Ranks to the right double*, (and) *Files to the right double*. E. *The second man from the Front.*

To make the F. *sixth and last-rank in dignity file-leaders*, (Command) *File-leaders stand, the rest passe through to the left, and place your selves before your leaders*. F. *The second rank from the Reere.*

The *Reducement* is placed at the lower end of the *Table*.

CHAP. LXXII.

Of drawing the Files again into a Body, and preparing them for skirmish.

BY this time (me thinks) I heare the * *Drums beat a Call*; which summons each *File-leader* to his *place*: every man observing his *order*, both in *rank* and *file*. The *Officers* * *Upon the first summons of the Drum, every File-leader is to draw forth his file, (whether he be exercising them in Posture or Motion) and to repaire to the Rendevouz or Colours.*

having

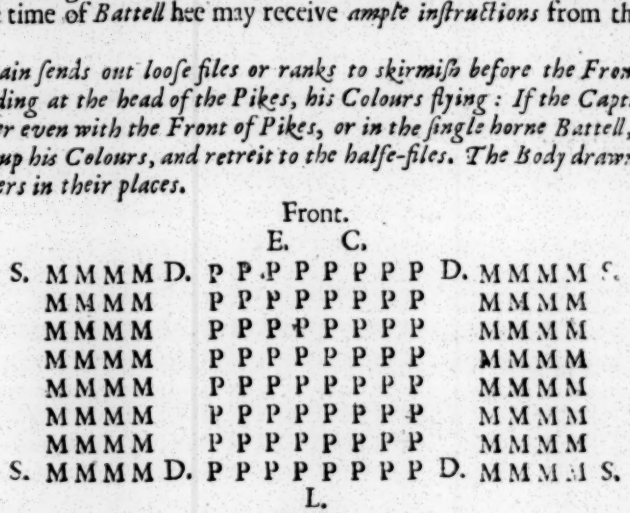
having taken their due *places*; the *Captain* and *Ensigne* in the *Front of Pikes*, the *Lieutenant* in the *Reere*; the *Serjeants* on the *flanks*; the *Drums* on the *Front* and *Reer-angle* of the *Pikes*: as you may perceive by the *square Figure* following.

Now the *Drums beat a Martch*, the *Ensigne* flying at the *head* of the *Pikes*, the *Pike* and *Musquets shouldred*, *martching* at their *distance* of *Order* [a] in *File*, at *Open-Order* in *Ranke*: presently, by a [b] *signe* from the *Captain*, the *Drums beat a Preparative*, the *Pike advance*, the *Ranks close forwards to their Order*, the *Musquettiers make ready*, and every man prepares himselfe for *Battell* or *Skirmish*. And here the eyes of the *Drum* must be very vigilant to observe his *Captaine* or *Commander*, that by the least *signe*, either of hand, *leading-staffe*, or whatsoever else hee carries, hee may either continue his *Charge*, *Retreit*, or else *Charge home*; and every *Souldier* ought to be so well *trained* and *practised*, that in the time of *Battell* hee may receive *ample instructions* from the *sound* of the *Drum*.

[a] *Distance in rank and file is to be understood betweene rank and file and not as some would fondly wrest it.*

[b] *That is, to advance his Keyn, Pike, or Leading-staffe.*

If the Captain sends out loose files or ranks to skirmish before the Front, the Ensigne continues standing at the head of the Pikes, his Colours flying: If the Captaine prepare to give fire, either even with the Front of Pikes, or in the single horne Battell, then the Ensigne to furle-up his Colours, and retreit to the halfe-files. The Body drawn into a square with the Officers in their places.



Small Companies have beyond the Seas but two Serjeants and two Drums.

Thus many *Officers* may serve for a larger *Company*, if the *Souldiers* be expert and skilfull: and to the contrary, they are all too few, if they be raw and unexperienced. I have seen some *Companies* which have been so absolutely ignorant, that each man would have needed an *Officer* to have kept him orderly in his place: Nevertheless, I make no doubt but that by the carefull over-sight of the *Lord Lieutenants*, the good assistance of the *Deputies*, and the diligence of the *Captaines* and their *Officers*, this fault will quickly be amended. And this might easily enough be done, if that those which are *owners* of *Armes* would meet one houre or two in a fortnight, (at their best leasures) and first practise the *Postures* of the *Pike* and *Musquet*, not omitting to *exercise* the *Motions* and *Firing* when they are grown more *expert*. If any shall object, that however this may be done in *Towns* and *Cities*, yet it cannot be in the *Country Villages*: I answer, that if they meet not above foure, six, or eight in a place, although they have no *Officer* to instruct them, yet by conferring and trying, and often practising, they will begin to carry their *Arms* with more ease, and to use them with more delight. Neither need they to be altogether ignorant, seeing there are divers printed *pourtraitures* of the *Postures* of each *Armes*, as also *bookes* whereby they may have very *ample instruction*: By which having attained some little skill, they will not be contented untill they have better improved it, by the instruction of the

The willing mind will find many wayes to learne.

their *Officers*; after which they will prove better *proficients* in one houre, then as they were before in a yeare.

CHAP. LXXIII.

Of Firing by forlorne Files, three ſeverall wayes.

BEfore I enter upon *Formes* and *Figures* of *Battell*, be pleaſed to obſerve with me, that all *firings* are either *direct* or *oblique*: notwithſtanding that the *formes* are full enough of *variety*, occaſioned (moſt times) by the *ſcituation* of the *place*, the *order* of the *Enemy*, and the *number* of *men*, with other *politicall obſervations* for the gaining of *wind* and *ſunne*. For the manner of *firings*, they are ſometimes *advancing* againſt an *Enemy*, ſometimes *receiving* the *Enemies charge* upon a *ſtand*, or elſe *retreiting*. Otherwhiles we *give fire* in the *Reere*, *martching* from the *Enemy*; or in *Flanke*, *martching* by an *Enemy*; and it may ſo fall out, that the *Enemy* may *charge* in ſeverall places at once, as in *Front* and *Reere*; or in *Front*, *Reere*, and *Flank*; of which particulars, I will ſeverally treat, deſiring to give content to all, not making the leaſt queſtion, but that benefit may accrue unto ſome. And therefore hoping that the *courteous* and beſt *quallified* will accept of my good meaning, and not refuſe my eates, although preſented unto them in earthen veſſels; whereby I ſhall be induced with more willingneſſe to proceed in my intended diſcourſes, ſo you be pleaſed to favour me with your better *opinions*; neither raſhly condemning me of *prodigality*, for enterpriſing a work of ſuch *conſequence* as this; nor too ſuddenly accuſing my ſimplicity, for preferring my *ruſh-light* before the *Sun*, when others ſuffer their *Torches* to burne out in dark Lanternes; whom I confeſſe to be farre more able (were they but halfe ſo willing) to have imparted of their *Talents* to the benefit of their *Countrey*. But ſeeing that they will not vouchſafe it, and that I, like *bold Bayard*, have adventured thus farre, I ſhall (with your good favour) proceed: And firſt I will begin with *Firings in Front, advancing*, and *ſtanding*; and ſo to the reſt. And for the more cleare expreſſion of each *firing*, I will deliver them both in *words* and *Figures*: The *firſt* whereof ſhall be a * *Firing by forlorne files*, which commonly is uſed in our *exerciſe* two manner of wayes: One way is, for the *two outer-moſt files* of each *flank* of *Muſquettiers* to *martch* forth, being led on by the two *junior Serjeants*, ſo far as by the ſuperiour *Commander* ſhall be thought fit; who being there to *ſtand*, the *fore-moſt ranks* are to *give fire*, *wheeling-off* both to the *right*, or to the *right* and *left*, (if it be ſo commanded) and to place themſelves in the *Reer* of their own *files*, the reſt *firing*, and doing of the like, untill they have *fired* once or twice over, according to their directions. This done, the next *two out-moſt files* of each *flanke* are to *martch* forwards into the *place* aſſigned, and to doe the like: thoſe *files* which formerly *gave fire* in the mean time *trooping* back, and placing themſelves next the *Pikes*, on the *in-ſide* of the *diviſions* of *Muſquettiers*; the reſt of the *Muſquettiers* (in like manner) *martching up*, and *firing*; ſtill placing themſelves next the *Pikes*, as afore-ſaid. When they have *fired* all over, and placed themſelves according to theſe *directions*, they are *reduced* as at firſt. A ſecond way of *Firing by forlorne files* may be after this manner: The *out-moſt files* of each *flank* are led forth by the *Serjeants* (according to their charge) untill they have brought them unto a *fit place* for *execution*; and then they *command* their *files* to *rank inward*, and to *preſent*, and *fire* all together; as you may plainly perceive by the *Figure* following.

All firings either to the Front, Reer or flanks, whether martching or ſtanding, are either direct or oblique.

** Firing by forlorn files.*

Another way of firing. Note the diſtinction.

Note that the outermost file of each flanke being martcht forth, the next outermost files are to follow in the reere untill the two first files have ranked inwards. Then the leaders of the second files are to

S	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	S
	M															M		
	M															M		
	M															M		
	M															M		
	M															M		
	M							C								M		
	M							E								M		
S	M	M	M	D	P	P	P	P	P	P	P	P	D	M	M	M	S	
•	•	M	M		P	P	P	P	P	P	P	P		M	M	•	•	
•	•	M	M		P	P	P	P	P	P	P	P		M	M	•	•	
•	•	M	M		P	P	P	P	P	P	P	P		M	M	•	•	
•	•	M	M		P	P	P	P	P	P	P	P		M	M	•	•	
•	•	M	M		P	P	P	P	P	P	P	P		M	M	•	•	
•	•	M	M	D	P	P	P	P	P	P	P	P	D	M	M	•	•	
								L.										

martch strait after the first file-leaders, untill they have closed to their order.

* *The files being ranked inwards, the file-leaders become the outermost men of the rankes when they give fire, and become leaders of their files againe, in the wheeling off after they have fired.*

The first two *Files* having *ranked inward, presented* and *fired*, are to *wheele-off* to the *right* and *left*; following their * *leaders* in *single files*, and placing themselves on the *inside* of their *divisions* of *Musquetiers* next the *Pikes*; the next *outmost files* which followed the first in the *reere*, in the meane time, *ranking inward, firing*, and *wheeling-off*, as before, and placing themselves next the *Pikes*. And so forwards for all the rest of the *files*: still *martching up*, and doing the like, so long as the *Captaine* or *Commander* shall see fitting. These kinds of *firings* (and all such like) are either for the *beginning* of *skirmishes*, before the *Bodies* come within shot one of another, or to provoke the *Enemy* to *battell*, to draw them into some *ambushment* and other such politicall ends: the *number* of men which *martch* forth upon such *designes*, nor the *manner*, are not alwayes certaine, but consist sometimes of more, sometimes of fewer, according to the *number, time*, and *place*. If the *Commander* please, *the outermost-file on each flanke* may when they *move forwards, and are come to their ground for firing*; *ranke the one half of each file inward into the front: the rest being led by their half-file-leaders, move forwards to their Order, standing file-wise after the outermost-men (of the former ranke) who are the file-leaders*; *having fired, they are to wheel-off*; *the others in the interim, ranking into their places*; *the next out-most Files to martch forwards*, doing according to the former directions for the whole Files.

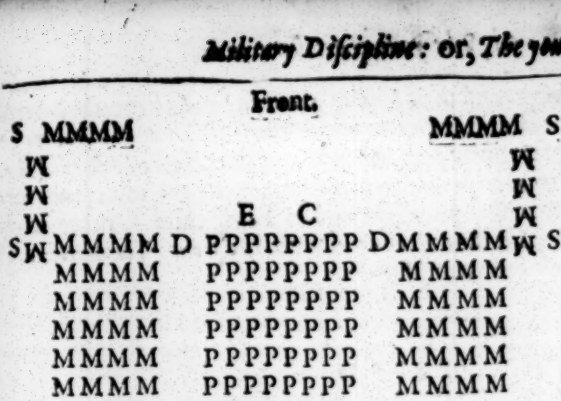
CHAP. LXXIV.

Of Firings by two rankes, ten paces advanced before the Front: Next, even with the Front: And lastly, even with the half-files.

ADvancing of two *rankes* to *fire*, *ten paces* before the Front, is most commonly used, when one or both *Battells* martch against each other; the *Musquettiers* being led forth by two ranks together ten or twenty *paces*, before the *front* of the *body*; that so they may come neere enough to doe certaine *execution*. A *Serjeant* from each *flanke*, leading up the two *fore-most rankes*, (according as they shall have order) the first *ranke of each flanke* is to *present*, and *give fire*, *wheeling* either all *off* to the *right*, or to the *right* and *left*, as you may perceive by the following Figure.

Front.

Front.



L

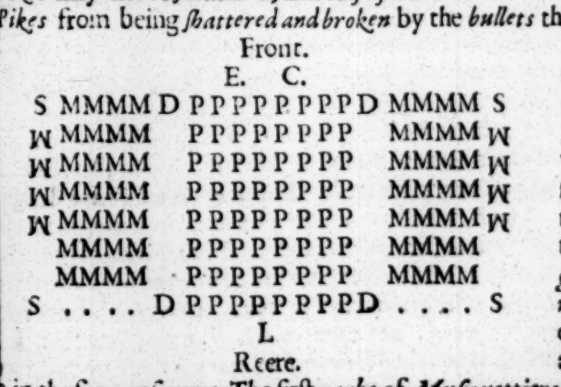
Reere.

The first *ranke* having *presented, fired,* and *wheeled-off* (as aforesaid) are to *march* close down in *single file*, within *three foot* of their own *flanks*, untill they come to the *reere* of their owne *divisions*; where every man is to place himselfe in the *reere* of his owne *file*. The second *ranke* being at the *distance* of *three foote* behind the first *ranke*; when they first tooke their *ground*: they likewise are to rest their *Musquets*, mounting their *muzzles* cleare of their *leaders*; and so to stand with their *matches cockt*, and *pannes guarded*, that so they may *levell* and *fire* as soone as their *leaders are cleare* of them, and *wheele-off*, in like manner *placing* themselves as they were before. The next two *ranks* are to begin to *advance forwards*, when they see the *last* of the *two former rankes*, *presented*, *ready* to *fire*. And they also having *fired*, *wheele-off* as the others did before them. And so successively, the rest of the *ranks advancing*, *firing*, and *wheeling-off againe placing themselves* according to former *directions*. This way they may *give fire*, *once* or *oftner* over, as the *enemy* doth *advance*, or the *Commander* shall see fitting. All this while that the *Musquettiers advance* so farre before the *Front*, (if the *body* be upon *march*) the *Pikes* may be *shouldered*: but when the *bodies* come within *eight-score*, or lesse, (*if there bee any doubt of the Enemies horse*) then it is fit that the *Musquettiers give fire* even with the *front* of the *Pikes*, and that the *Pikemen advance* their *Pikes*, and *close forwards* to their *distance* of *three foot*, that so they may be *even* in *ranke* with their *Musquettiers*, as you may perceive by the following *Figure*. If there be no feare of the *enemies horse*; then the *Pikes* may move *shouldred, and close forward to their Order*; by that meanes saving their *Pikes* from being *shattered and broken* by the *bullets* that flie at *randome*.

The manner described how this firing ought to be performed.

No Commander so precisely bound to any forme, but that he may as occasion serveth, alter this Figure at his pleasure.

Front.



L

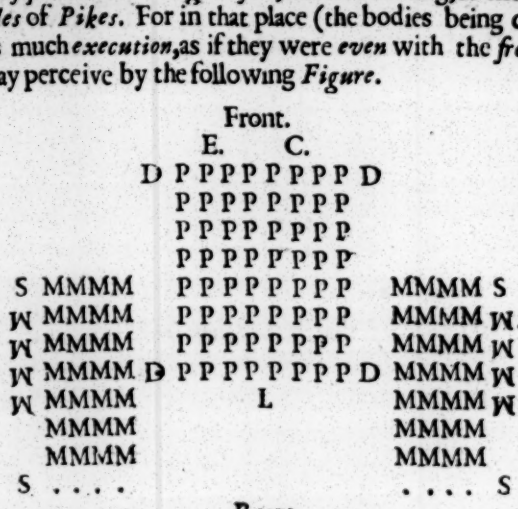
Reere.

Now the *Pikes* being *advanced*, and the *ranks closed forwards* to their due *distance* of *Order*, the *Musquettiers* are to *present*, *even* with the *front*, every *ranke* successively moving forwards, untill they they come to be *even* in *ranke* with the first *ranke* of *Pikes*, there to *give fire*, and to *wheele-off* to the *right* and *left*, *trooping file-wise*, down close to their own divisions: and taking their places in the *reer*, as in the former figures. The first *ranke* of *Musquettiers* having *fired* and *wheeled* away, the next *rankes* are to *move* forwards at three * *motions* into their places, and there to *give fire* after the same manner; *wheeling* away again, and placing themselves according to former

**The three Motions are*, Blow your coale, Open your Pan, Present brest-high. *You are to* blow your coale, *stepping forwards with your left foot.* Open your Pan, *stepping forwards with your right-foot.* Present, *stepping forwards with your left-foot. These Motions are to be performed hand and foot together, by every one that advanceth ground to give fire, without expecting any directions in time of skirmish.*

mer *directions*, every *ranke* ſtill making good their *leaders ground*. In this ſort the *battell* may be continued, untill they have fired once, twice, or oftner over: and that the *Bodies* be come ſo cloſe together, that the *Pikes* begin to *port*, and ſo at length come to *puſh of Pike*. Which done, the *Muſquettiers* are to *give fire*, either retreating, or elſe not to *advance* further then the *half-files* of *Pikes*. For in that place (the bodies being come ſo neere together) they will doe as much *execution*, as if they were *even* with the *front*. The manner of the *ſtanding*, you may perceive by the following *Figure*.

The Pikes comming to the port and charge: the Muſquettiers either firing without advancing into their leaders ground or even with the halfe-files.



The *Pikes* being now *charged* and ready to come to the *puſh*, the *Muſquettiers* are to advance no further then the *Halfe-files* of *Pikes*: that ſo they may do execution with their *ſhot* and be out of danger of the Pikes. This having attained, they are there to *preſent* and *give fire*; every ranke ſtill *moving forwards*, and maintaining his leaders *ground*. After they have performed their *firing*, they are to *wheele-off* by *diviſion*, as in the former Figures ſtill placing themſelves in the *reere* of their own *files*, alwaies taking their directions from the *Drum*, either for *charging* on, or *retreiting*, &c.

The reducement.

The *Battell* or charge being ended, th*e Reducement* is eaſie. The *leader* of each *file*, being in his place at the *head* of his *file*, command the *Muſquettiers* to *martch* up, *even* with the *front* of *Pikes*, and then they will be as at firſt.

Note the ſeverall obſervations.

Obſerve withall that when the *firing* is to be performed, *even* with the *Front*, then the *Muſquettiers* are ſtill to make good their *leaders ground*: the want to be in the place of moſt ſecuritie, (which is the *Reere*) as you may perceive by the *pricks* which I have deſigned, for noting out the *empty roomes* of ſuch, who have *cloſed forwards* to make good the *ground* in the *Front*: the others that laſt *fired*, are *wheeled-off*, and *trooping* downe into their places. When the firing is even with the halfe-files, they are to doe the like, unleſſe the *Drumme beat a retreit*, for then the *Muſquettiers* neither *advance*, nor *retreit*: but every *Ranke giving fire* on the ſame *ground* they *ſtand*: and then *wheel-off* again, that their followes may doe as much. * Nevertheleſſe when the *forlorne files martch forth*, or that two ranks *martch forth*, ten *paces* (or more) before the front: then they are to give *fire*, as upon a *retreit*: unleſſe the *enemy* give ground or flye. I will now ſhew ſome other wayes of *firing in front* (before I ſhew the *firings* in the *reere*) The firſt whereof, ſhall be the *horne battell*: as in the Chapter following.

** Note concerning forlorne files, and two ranks before the front.*

CHAP.

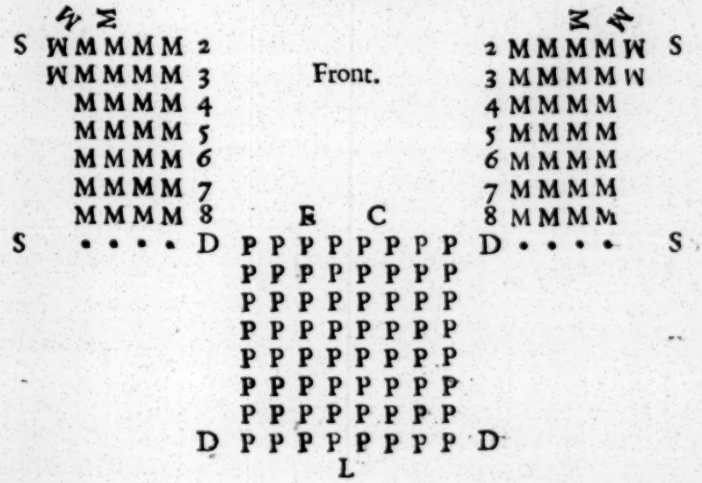
CHAP. LXXV.

Of the Horn-Battell, how to make it, and to reduce it by firing.

THe *Horn-Battell* may be for the ſame occaſion and uſe, as the *firing* by *two ranks, ten paces advancing before the Front*; and is by ſome held more ſerviceable; becauſe that the *Muſquetticrs* doe their *execution* more roundly, without any intermiſſion of time, and keep themſelves without ſtragling from their *Bodies*. Beſides, the *Wings* of *Muſquettiers*, being ſo advanced, are more apt for *over-fronting*, and more eaſily to be *wheeled*, whereby to charge the Enemy in *flank*: each of theſe *Wings* or *Diviſions* are to be led up by a *Serjeant* (or ſome other ſuperieur *Officer*) unto the *place* appointed by the *Chiefe*. But becauſe it may be performed in time of *exerciſe*, by the intelligible *Souldier*, obſerve the *Command* which produceth this following *Figure*.

Pikes ſtand, Muſquettiers martch, untill the Bringers-up rank with the Front of Pikes.

The Horn-Battell.



The *Figure* being perfect, the *firſt-rank of Muſquettiers preſent, and give fire, wheeling-off* either all to the *right*, or to the *right* and *left*, (according as they ſhall have direction) and placing themſelves orderly, in the *Reere* of their owne *files*. The *next rank* (after the ſame manner) *firing* and *wheeling-off*, and placing themſelves behind thoſe which were their *leaders*. Thus is every *ranke*, ſucceſſively, to doe the like, untill they have all *given fire*. If the *Commander* would ſtill preſerve and continue the ſame *Figure*, then let the *Muſquettiers* ſtill *move forwards*, into the ground (or place) of them that *fired* before them; and the *forme* will be the ſame. But if by the *Chiefetain* it be found neceſſary, that after once or twice *firing over*, the *Shot* ſhould *flank* their *Pikes*, then the *Muſquettiers* muſt not advance into their *leaders ground*, but to the contrary, every *rank* is to *preſent and fire* on the ſame *ground* they ſtand, and that ſo ſoon as they are *cleare* of their *leaders*. Or, if need be, the *Pikes* may advance and *martch-up*, to make their *Front intire*: which being done, the *File-leaders* of *Muſquettiers* being in *Front*, they are *reduced*.

The firing deſcribed.

Note.

The reducement.

CHAP. LXXVI.

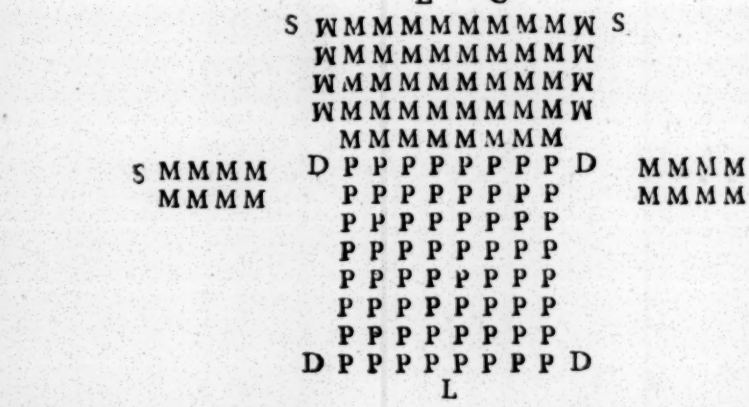
Of the Demie-hearse Battell: The use of the Figure, how to make it, and to reduce it by firing.

THe next *firing* in *Front*, which I present unto you, is the *Demie-hearse*: which is a *Figure*, firme, solid, and stable; yea, and doth as much *execution* as any of the former, and that with halfe the danger. For the *Pikes* in the former *Figure*, they either *rank even* with the *Front* of *Musquets*, or else the *division* of *Musquettiers* being open, they become liable to the danger of the Enemies *shot*, themselves not being able to doe any thing, either *offensive* or *defensive*. But, to the contrary, in this *Figure* they are securely covered by their owne *Musquettiers*, untill they approach nearer to the Enemy; whereby they may be able to doe some service, either by sending their *showres* of *arrowes* amongst them, thereby breaking their order and array; or else, by *closing nearer*, come to the *shock*, and so try the fortune of the day. But not to hold you longer in *circumstance*, take the words of *command*, which produce the *Figure* as followeth:

The danger of the Demie-hearse is feare of being overfronted.

Pikes stand, Musquettiers advance before your Front of Pikes, and close your Divisions.

Front.



The *firings* on this *Figure* may be divers; yet I shall content my selfe onely to shew two of them: The * *first* is, that the *Musquettiers* may, at the discretion of the *Commander*, *give fire* in *Front*, and so *wheele-off* by *division* (or all to the *right*, as shall best please him that *commands* in *chiefe*) placing themselves in the *Reere* of their owne *divisions* and *files* of *shot*, which is just before the *Front* of *Pikes*. The *next ranks* then *moving forwards* into their *leaders ground*, are to *present*, *fire*, *wheele-off*, and place themselves after the same manner; the rest of the *Musquettiers* doing the like, untill they have all *given fire*: which *Firing* doth nothing alter the *form* or *Figure* of *Battell*. Having *fired* once or twice over this way, the second *Firing* shall serve for *Reducement*; which is indeed the *Firing* intended to be exprest by this *Figure*. And that I may by *words* the more clearly explain the *Worke*, take these *directions* following.

** The firing on this Figure.*

The second firing on this Figure serveth for the Reducement.

The * *first-rank* having *given fire*, are to *wheele* equally *off* by *division*, each part falling *file-wise down*, close by their *flanks* of *Musquettiers*, untill the *leaders* of the *ranks* of *Musquets* come down as low as the *first-rank* of *Pikes*; which being performed, they are to

Note this direction.

face

face outwards, and to move so far-forth in a *straight line*, untill they have *ranked even* with the *first-rank* of *Pikes*. But here-withall are they to observe, that they must leave an *intervall* between the *inner-most Musquet* of each *flanke*, and the *outer-most File-leader* of the *Pikes*. So soon as the *first-rank* hath *given fire* and *wheeled-away*, the *second-rank* is to *give fire*, *wheeling-off* as before, and *passing down* between the *intervals* on the *flanks*, placing themselves after their *leaders*. The same is every *rank* successively to doe, untill all the *Musquettiers* are drawn from before the *Front*, and placed on the *flanks* of their *Pikes*. But when there are not above two *ranks* of *Musquettiers* to *give fire*, then the *Pikes* may *Port*; and when the *Musquettiers* have *fired*, and are *wheeled-away*, they may *Charge*. And lastly, the *Pikes* being *re-advanced*, the *Body* stands *reduced* as at first.

The Pikes Port and Charge.

CHAP. LXXVII.

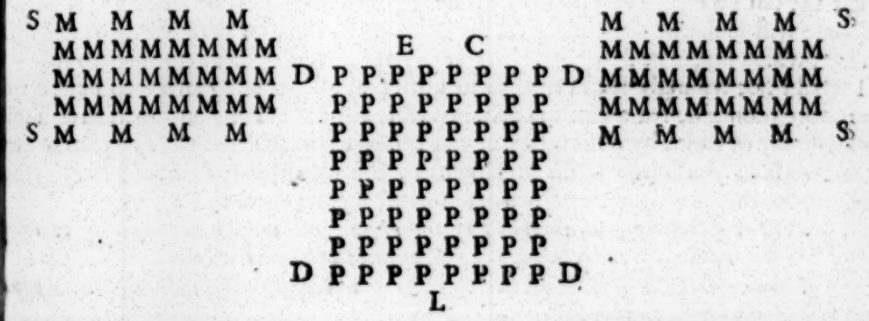
Of giving fire, advancing, by way of Introduction, with the beneficiall use of the Bow and Pike.

I Shall next offer to your perusall a *Figure* of *Introduction*; which is a *passing thorow* or *between*: being a *Firing*, *advancing* against the *Enemy*, and *gaining ground*. I will not dispute how usefull it is; but sure I am, it is over-ballanced with danger. As for such whom I have seen to *practise* it, they have rather used it for *variety*, in a wel-experienced *Company*, than for any known *excellency* it hath in it selfe. But if these *lines* happen to be over-lookt by any, that preserves a better opinion of this *Firing* by *Introduction* than I doe, I shall be willing to leave them to their owne liking; while I in the mean time proceed to shew the manner of the *execution*, which is usually one of these two wayes. The first, when the *Motion is begun by the second-rank from the Front*. The other, when *is begun by the Bringers-up*. Nevertheless you must note, that your *Files* of *Musquetiers* must be *opened* to their *Open-Order*, before the *Firing* begin, that so the *Musquetiers* may passe between the *intervals* of each *File*, to *give fire* in the *Front*. And therefore take the words of *Command* and *Direction*, which will produce this *Figure* following.

Firing by Introduction ordinarily performed these two manner of wayes.

Musquettiers, make ready to give fire by Introduction.

Files of Musquettiers, open by division to your Open-Order.



This *Firing* by *Introduction* may be thus performed: The *Pikes* being *flanke* with their *Musquettiers*, the *first-rank* of each *flank present* and *give fire*; having *fired*, they *stand* and *make ready* again in the same place: The *second-rank* passing forwards before the *first*,

The direction for firing by Introduction.

doe

If there be no direction given, they are to paſſe thorow to the right.

doe there *fire* and *ſtand:* The *third-rank* then paſſing forwards after the *ſecond*, and ſtanding *even in rank* with them that firſt *fired*, that ſo ſoon as the *ſecond-rank* hath *fired*, they may quickly ſtep before them, and *fire* in like manner. In this *Firing*, ſtill the *rank* which is next to *fire* ſtands *even in rank* with them which laſt *fired*, untill thoſe which *ſtand preſented* have likewiſe *given fire*; after which, they then paſſe before them: the *rank* which was their next *followers*, paſſing forwards, and *ranking* with thoſe which laſt *fired*; every man following his *leader* ſucceſſively, untill the *Bringers-up give fire*, and *ſtand*; and then the *Figure* will become a *Horn-Battell*. All the while that this *Firing* by *Introduction* is continued, the *Pikes* may be * *ſhouldred* (if there be no feare of *Horſe*) or otherwiſe at diſcretion. If you continue this *Firing* twice over, the *Muſquettiers* will have their right *places*: which being done, *martch-up* your *Pikes*, to *rank even* with your *Muſquettiers* in *Front*, and they are *reduced*. For the [a] other way of *Firing* by *Introduction*, the *firſt-rank* (or *File-leaders*) are to *give fire* as before, and to *ſtand*; the *laſt-rank* (or *Bringers-up*) in the interim of their *Firing*, *martching-up*, and *ranking-even* with the *ſecond-rank*, the reſt following their *Bringers-up*, as they doe when *Bringers-up double* their *Front*. The *firſt-rank* having *fired*, the *Bringers-up* ſtep immediately before them, *preſent*, and *give fire*; the reſt ſtill ſucceſſively doing the like, untill every *rank* have *given fire* once over. Obſerve withall, that the *File-leaders* are to *give fire* twice over, being the firſt and the laſt; and then to *ſtand*, the *Pikes martching-up even* with their *Front* of *Muſquettiers*: And thus they are *reduced*, as at firſt. The *Pike-men* all the time of this *Firing* do no ſervice: notwithſtanding, if one *halfe* of them had *Bowes* faſtened unto their *Pikes* (being able and wel-practiſed men) they might, whileſt the *Muſquettiers* are in *Firing*, be dealing of their doles about; and although their *arrowes* did not happen to wound mortally, yet the whiſtling noyſe, the terrour of the ſight, and the ſeverall hurts (which could not chuſe but be many) would be a great abatement to the ſtouteſt courages: And great pity it is to ſee the luſty *Pike-man* poorly to drop down by the *Muſquet-ſhot*, himſelf not being able to hurt his Enemy at that diſtance, nor defend himſelfe.

* *The Pikes may be ſhouldred, and ſtill be moving ſlowly forwards, and ſo keep even with the Front of Muſquettiers.*

[a] *A ſecond way of firing by Introduction.*

The Reducement.

The uſe of the Bow and Pike.

CHAP. LXXVIII.

The way to make the Diamond-Battell: ſeverall wayes to Fire upon it: with divers other Figures and Firings, which are thereby produced.

THe *Diamond-Battell* is alſo a *Firing* in *Front*, though more for ſhew then *moderne ſervice*; yet becauſe that ſome hold it in venerable reſpect, I thought fit to place it amongſt the reſt; leaving every man to his liking, either to uſe it or refuſe it. It may be that ſome will look that I ſhould make the *Shear-Battell*, the *Wedge*, the *Saw*, and many ſuch like, which might be made either *hollow* or *ſolid*; but I ſhall intreat ſuch to ſpare me, for I would not willingly ſpend time to ſo ſmall purpoſe; chuſing rather to inſiſt on *Figures* more profitable for them, and commendable for me: Yet if any man have a mind to practiſe any of them, by obſervation of this *Diamond-Battell* hee may eaſily make them. But not to hold you longer with circumſtance, the words of *Command* and *Direction* which are for the making of this *Diamond-Battell*, are as followeth:

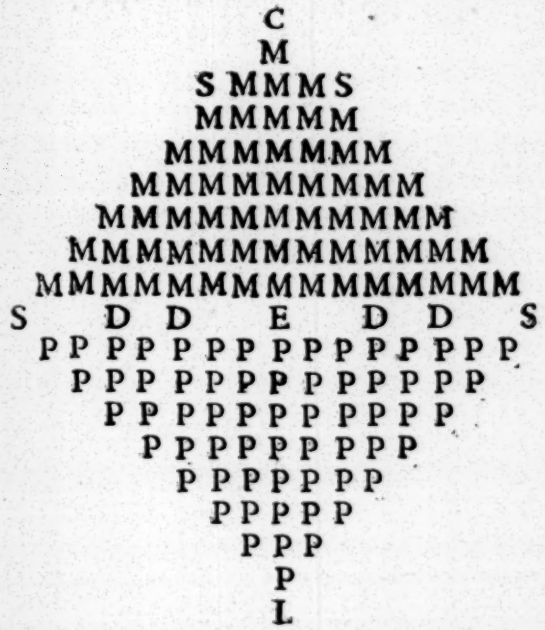
Firſt, cauſe your Muſquettiers of the right-flank to open to the right, to a ſufficient diſtance, for receiving the Muſquets of the left-flank.

Then command the Muſquettiers of the left-flank to paſſe thorow, into the ſpace of ground on the right.

Or you may cauſe your Pikes to ſtand, and Muſquettiers to move all into the Front, then joyn them before the Pikes; which is the better way. But when your Muſquettiers be all in Front, or on the Flank,

The Command is,

Files of Muſquettiers, ranke 1. 3. 5. 7. *&c. by increaſe to the left.*
Files of Pikes, ranke after your Muſquettiers, accordingly by decreaſe.



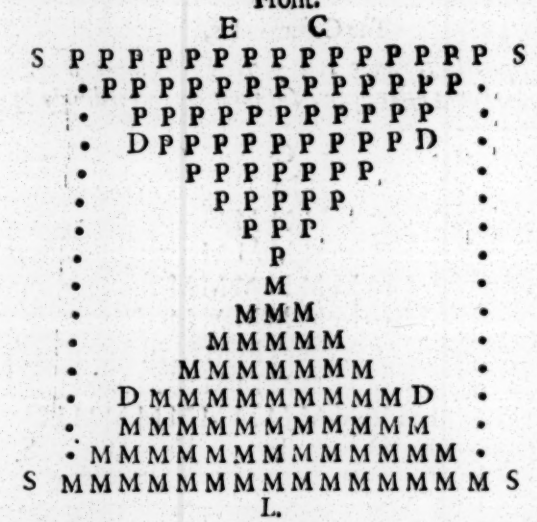
The *Muſquettiers* may *Fire* on this Figure, divers wayes: though I onely intend to ſpeak unto two of them. The firſt is the moſt uſuall way: and that is the *giving fire in rank*; the fore-moſt man (or *point* of the *Diamond*) firſt *giving fire*: then *wheeling-off* to the *right*, and placing himſelf juſt behind the *ſingle Pikeman* in the *reere*. Then the *next rank* being three men, *give fire wheeling-off* by *diviſion*: and placing themſelves in rank, behind the *ſingle Muſquettier*, as they were before the *Firing* began. This done, the rank of five *Muſquettiers*, *gives fire*; *wheeling-off*, in like manner, by *diviſion*: ever obſerving, that where the *number* is *odde*, and they *commanded* to *wheel-off* by *diviſion*, there the greateſt *number* alwayes goeth to the right. And ſo in like manner, the *Ranks give fire* ſucceſſively; and place themſelves after their *leaders*, as before. When all the *Muſquettiers* have *given fire*, and are *wheeled-off*, then *charge Pikes*, which will be fifteen in the *firſt ranke*, the reſt *decreaſing*. Having advanced your *Pikes*, your Figure will ſtand like two *wedges*, with their points joyned, as you may perceive by this Figure next following.

The way to fire on the Diamond Battell.

N

Front.

Front.



L.

Reere.

Observe this way of reducement, by interchanging of ground.

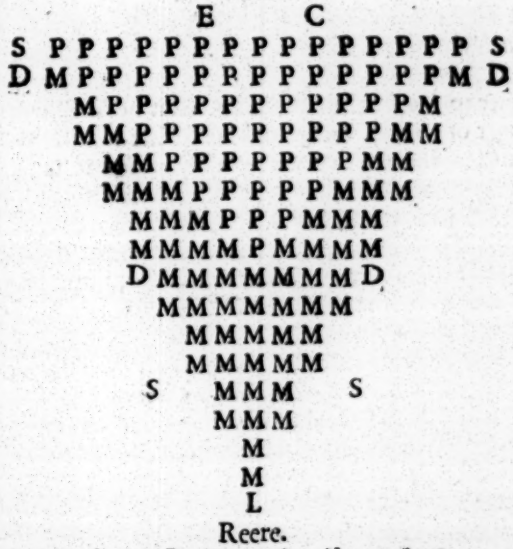
If you would reduce your men from this *figure*, without *firing*, (your men being sufficiently expert) let the *Musquettiers stand*, and *Pikes* face to the *Reer*, and so the *wedges* will stand faced in *opposition*; next, command them to *interchange ground*: the *Musquettiers* advancing forwards, into the *ground* of the *Pikes*, and the *Pikes* moving into the *ground* of the *Musquettiers*; then by facing the *Pikes* to the *former front*, the *body* will stand in form of a *Diamond* again.

If you would *reduce* this *Figure* again into the form of the Diamond, by firing your *Musquettiers*, (being now all in the *reere*) the *body* must *face-about*: and so the *firing* will be contrary to the former. But if you *wheel them about*, they may *give fire* the same way. Howsoever after they have *given fire*, they are to *wheel-off* by *division*, and to place themselves in the *reere* of the *Pikes*, even in ranke again, as they were when at first they *gave fire*. Thus having all *fired over*, and *wheeled-away*, the *Pikes* may charge: and being again *advanced*, the *body* will stand in form of a *Diamond*: and this I pray you to conceive, for I intend not to re-make the Figure.

An oblique firing from the Diamond, the Musquettiers countermarching & making a deep wedge. The direction for this firing.

The second way of *firing* on the *Diamond figure*, is by way of *Counter-march*: and is an *oblique firing*. For whereas in the other *firing* by *ranks* (in the *Diamond Battell*) each *ranke fired* by increase of two (*beginning* with one, and *ending* with fifteen in a *ranke*) this *firing* contrariwise, *begins* with 15 and *ends* with 1. still decreasing 2. For this *firing*, your *files* must be at *open-order*, because the *Musquettiers* must *counter-march* down between the *intervalls* of their owne *files* to the *right*: every *Musquettier* that finds himself without a *leader*, being to *present* and *give fire*, and then to *counter-march* to the *right*, placing himselfe in the *reere* of his owne *file*, behind the *Pikes*. When the first 15 have *fired*, then the next 13 *present*, *give fire*, and *counter-march*, still placing themselves in the *reere* of their owne *files*. Next there *fireth* 11 then 9, &c. for still there *fires* so many, as are clear from any *leaders*. And in this manner of *firing*, they that *fire together*, stand neither in *ranke* nor *file*, but *obliquely*. When all the *Musquettiers* have *fired*, and are *counter-marcht* into the *reer* of their own *files*, let the *Pikes charge*: and then the *form* of your *Battell* will be like a *deep wedge*: as you may perceive by the following *Figure*, where your *Ranks* are *alwayes two* and *two of a number*.

Front.



Your men ſtanding in this form of a *deep wedge*, if you pleaſe yet to be more [a] curious, *face* them all to the *Reere*, and command your *Muſquettiers* to *martch* 10. or 12. paces, your *Pikes* to ſtand; which done, your *Muſquettiers* will preſent you with an *hollow wedge*, and your *Pikes* with a *ſollid wedge*. Laſtly, to [b] *reduce* all theſe ſeverall forms into the *firſt, proper, ſquare-Battell*; firſt, let the *ſollid wedge cloſe forward*, into the *hollow* of the other: then let the *Muſquettiers make ready, preſent*, and *fire*, as before: that is to ſay, Every *Muſquettier* that finds himſelfe without a *leader* is to *give fire*, and to *counter-martch* to the *Reere* of his own *File*, the reſt doing the like, ſucceſſively. When they have all *fired*, and are *counter-martcht* clear, let the *Pikes charge*, and then your *Body* will have the *form* of a *Diamond* again. Next, [c] *face* them all to the *Reere*, and command, *Ranks, file 8 to the right*: which being done, paſſe thorow the *Muſquettiers* which belong to the *left-flanke*, into their places; and cloſe the *Muſquettiers* of the *right-flank* to their due *diſtance*: This done, they will ſtand all properly *reduced* into the *Square*, as at firſt.

[a] *Curioſity ſometimes not to be neglected, becauſe ſome men being therewith delighted, may thereby be gained to affect the practice of Armes, and after ſome continuance therein, may haply prove in the Van.*

ſollid, and good Souldiers. [b] *The Reducement* [c] *This facing to the Reere, makes the Muſquettiers to be again*

CHAP. LXXIX.

Of the Convex half-Moon: The uſe of the Figure; and of ſeverall wayes of firing upon it.

THe *Convex halfe-moon*, or *Semi-circular Battell*, is a *form* in it ſelfe both good and uſefull; which the time, the number, and place (with other circumſtance) may make either beneficiall or prejudiciall: wiſe *Captains* and *Commanders* ever fore-ſeeing with providence, what *forms* or *Figures* may be moſt *profitable* and *available* for the preſent *ſervice*. * This *Convex Figure* may be uſefull, either at the *landing* of *Souldiers* in an Enemies *Countrey*, or for neceſſity (the Enemy being more able in *Horſe*) making uſe either of *hedge, ditch, wood, creeke*, or *river*, to ſecure the *Reere*. For the *Figure* it ſelfe it may be made many wayes; either with the *Muſquettiers* outer-moſt, or inner-moſt, or lined, &c. at the diſcretion of the *Commander*. It may alſo be made in a *Regimentall* way, or after the way of a ſmall and private *Company*: But becauſe I have only in this my ſmall *Treatiſe*, taken upon me to ſhew the *Poſtures, Motions*, and *Figures*, which are moſt uſu-

* *The uſefulneſſe of this Figure.*

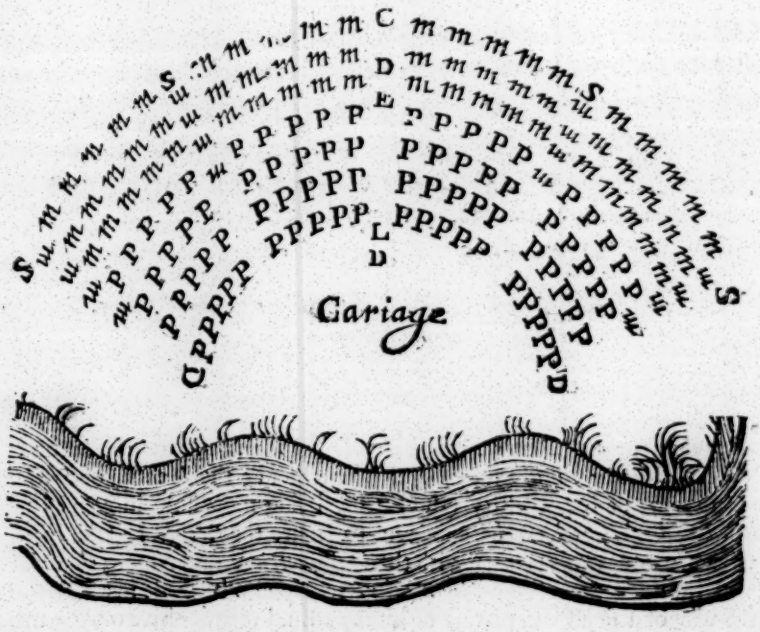
ally done in a ſmall *Company*, (although many of them, yea the more part, may be very fit for larger *Bodies*) I ſhall content my ſelfe to *ſaile* in ſo ſmall a *Bottom*; not deſiring to put on more *ſaile*, than will ſuffice for the *bearing* of ſo ſmall a *burden*. Wherefore my requeſt ſhall be, that every *curteous* and *skilfull Pilot*, that ſhall *come-aboard* this ſmall *Barke* will be pleaſed, neither to *lanch* it into the *main*, leſt it be *ſwallowed* in the *ſurges*; nor to *expoſe* it to the danger of *ſhelves*, *rocks*, and *ſands*, leſt it ſuffer *ſhip-wracke* for want of good *guidance*; but ſo to *ſteere* it, that it may ſafely *arrive* at its deſired *Harbour*: wherein they will both honour themſelves, in expreſſing their vertues; and gratifie me, by applying each *Motion*, *Figure* and *Forme*, to his right uſe, and true intention. I will now ſhew how the *Figure* is to be made, which is as followeth: If your *Battell* be in *form* of an *Hearſe*, then *wheele* them to the *right* or *left-about*, untill they have attained this *Figure*. But if in a *Square*, then obſerve theſe following *words*; which will produce the *Figure*:

The direction to make this Figure.

Wheel your Flanks into the Front; then face the Body to one of the Flanks; and wheel your Battell into a Convex halfe-Moon.

If your *Body* be *large*, then, inſtead of *wheeling the Flanks into the Front*, cauſe your *Muſquettiers* to *move forwards*, and place themſelves *before their Pikes*: Then command 5. or 6. of the *out-moſt Files* on each *Flank* (both *Muſquettiers* and *Pikes*) *to wheele*; thoſe on the *left-flank to the left*, thoſe on the *right-flank to the right*; the reſt of the *Body*, in the mean time, *moving forwards* to a convenient *diſtance*, and 5. 6. or more of the *outer-moſt Files* to *ſtand*, and then to *wheele to each hand*, as afore-ſaid; the reſt doing the like ſucceſſively, untill you have *formed* your *Figure*.

The Convex halfe-Moon.



Having

Having brought your *Souldiers* into this [a] *Convex forme*, you may face them all *inward* for *ſpeech*, or *outward* for *fight*. Then let the *Officers* make *Intervals* for the *Muſquettiers*; and let the *outer-moſt Arch*, or firſt rank of each diviſion, *preſent* and *give fire*, thoſe of the *right-flanke wheeling-off* to the *right*, the *left-flanke* to the *left*; placing themſelves in the *reere* of their owne diviſions of *Muſquettiers*, ſtill making good their *leaders* ground. The reſt of the *rankes* are to doe the ſame; untill they have all *given fire*. Nevertheleſſe, if your Enemy be too potent for you by reaſon of his *Horſe*, your [b] *Bow-Pikemen* need not ſtand idle, although they ſtand behind their *Muſquettiers*: for that they may ply them faſter with their ſhafts, then the others can with their ſhot; But if the [c] *Horſe* be ſo violent, that the *Muſquettiers* may not abide them, then let them *give fire*, and *wheel-off* by *diviſion*, as before; paſſing quite through their *Intervals*, and placing themſelves in the *reere* of their *Pikes*, every *ranke* making good their *leaders* ground. Thus alſo are the reſt of the *Muſquettiers* to *give fire*, placing themſelves in the concave part of the body, as aforeſaid, following in the *Reere* of the *Pikes*, which now make good the *Muſquettiers* ground. If [d] need be the *Pikes* may charge over-hand, or if occaſion ſerves at the foot, drawing forth their ſwords over their left-arms, and couching downe their heads: by which meanes the *Muſquettiers* may *give fire* over their ſhoulders. For the *firſt ranke* having *fired*, may kneel downe on the ground, and charge againe, the ſecond *ranke* may *give fire*, and kneel in like manner, making ready again. And ſo for the reſt, all *giving fire*, and kneeling on the ground, that ſo the next *ranke* behind may *give fire* over them. Thus continuing the *firing*, untill all the *Muſquettiers* have *given fire* once over. Nevertheleſſe, if the Enemy ſhall ſtill continue his charge, and preſſe upon you, the *firſt ranke* may riſe with the reſt, and *give fire* over again, as before. And ſo the battell may be continued; the *Pikes* ſtill keeping off the Horſe.

[a] *The ſeverall waies to fight upon this convex figure.*

[b] *The Bow and Pike very good and uſefull againſt the Horſe, in this figure of Battell.*

[c] *A good way in time of neceſſity, to beat off the inſolence of the Horſe.*

[d] *Another way to give fire by extraduction, as in the next Chapter.*

For the *reducement* of this figure, and to bring every man to his place, let your *Muſquettiers* (either *firing* or paſſing through) be brought into the *places* they were in, before they firſt *gave fire*, Then *face* the whole Body to one of the *flanks*, and march them untill they have evened their *ranks*, and ſtraitned their *files*. This done, if all your *Pikes* bee on the *right-flanke*, *wheele your right-flanke into the midſt*, if on the *left-flanke*, *wheele front and reere into the left-flanke*. This being done, let the *Commander* paſſe to his proper *file-leaders*, and *face* the whole Body to him, and they are reduced as at firſt. If you did not *wheel your flanks into the front*; But your Body being large enough, *you drew your Muſquettiers before your Pikes*: Then having ranged your Body even a-breſt: *Command your Muſquettiers to open to the right and left, untill they are cleer of the Pikes, then face to the firſt-front, and march up even a-breſt with the Pikes*, and they are *reduced* as at the firſt.

The Reducement.

CHAP. LXXX.

Of Extraduction: the ſeverall uſes, Firings, and Reducements.

THe next *Firing* which I ſhall take upon me to demonſtrate, ſhall be by way of *Extraduction*: which is alſo a *firing* in *front*. It may be to ſingular good uſe in a *ſtraight*, or *paſſage* where your *Wings* and *Reer* may be ſecured; your Enemy being ſuppoſed too powerfull and potent for you. Alſo if the contrary ſide *abound in Horſe* or foot; I ſhould then adviſe to draw ſome of your *Muſquettiers* into the *Reere* of your *Pikemen*, who may *give fire under the ſhelter of their Pikes*, being either *ported* or *charged*: And indeed I ſhall give this *Firing* by *Extraduction* this teſtimony. That of all *firings* (defenſive or offenſive) (thoſe of the *Half-pike* and *ſwines feather* excepted) it is the *beſt* and *ſafeſt againſt the Horſe* that yet I know of; each armes becomming the abſolute ſecurity of the other, and may be uſefull either in *ſmall* or *greater* Bodies. But this Chapter treats onely of a *party* or ſingle Company, and conceives it to be *chaſed* or *purſued* by *horſe*, but they having gotten into ſome *ſtraight*, there fill the mouth of the *paſſage* with your *Pikes*: and if the length

The uſe of this firing by Extraduction.

of your *Company* be not ſufficient to doe it, then double your *ranks* (as in this following *Figure*) and let your *Pikes* either *order*, *advance*, *port* or *charge*, according to the occaſion; your *Muſquettiers* being in the *reere*, may *martch up* into the *front* and *fire*. But before I ſhew the *Firing*, obſerve theſe following *directions*, which produce the *Figure*.

Pikes ſtand, Muſquettiers face to the reere, and martch, untill you are cleer of your body of Pikes.

Then face inward, and cloſe your diviſion: that thing done, face to your Leader, and double your ranks.

This being performed, the *Pikes* are all in *front*, the *Muſquettiers* in *Reere*.

A Firing by Extraduction.

Front.

The Muſquettiers in this firing are to ſleeve up file-wiſe to the front, and there give fire in ranke, croſſe the front of the Pikemen.

	S	M	M	M	M	M	M	M		M	M	M	M	M	M	M	S	
		P	P	P	P	P	P	P	C	P	P	P	P	P	P	P	M	
		P	P	P	P	P	P	P	D	P	P	P	P	P	P	P	M	
		P	P	P	P	P	P	P	E	P	P	P	P	P	P	P	M	
	D	P	P	P	P	P	P	P	D	P	P	P	P	P	P	P	M	D
		•	•	•	•	W	W	W	W	W	W	W	W	W	W	W		
		M	M	M	M	M	M	M	M		M	M	M	M	M	M	M	
	S	M	M	M	M	M	M	M	M		M	M	M	M	M	M	M	S

L.

Reere.

The direction for this firing.

Having ordered your *battell* in this manner, let the firſt *ranke* of *Muſquettiers* (which are thoſe that follow next after the *Pikes*) *face* to the *right*, and *martch* forth (*file-wiſe*) up cloſe by the *right-flanke* of *Pikes*, untill he that is the *leader* of them be come into the *front* of *Pikes*, then he is to lead them quite croſſe the *front* of *Pikes*, untill he have attained the further part of the *front* to the *left*; which being done, they are all to *ſtand*, *preſent* and *give fire*. You muſt note withall, in this *firing*, that he which was the *right-hand-man* of the *ranke*, and was the *leader* of the *motion*, now becomes the *left-hand-man*, when he gives fire; and that having *fired*, they are to *wheel-off* to the *left*, cloſe to the *left-flanke* of *Pikes*, and ſo to fall in the *reere* of the *Musquettiers*. In the *interim*, whileſt that the *rank* which firſt fired is *wheeling-away*, the *ſecond rank* is *martching* into their *places* to *give fire*. And in this manner they may maintaine their *Battaile*, ſo long as they pleaſe: the *Pikes* either *porting* or *charging* all the whiles. The *Muſquettiers* in the time of their *croſſing the front*, are to couch or ſtoop under their *Pikes*; that ſo they may be no impediment to the *Pikes* in their *charge*. There is another way of *firing by Extraduction*, which is, that the *right-hand-leader* of *Muſquettiers*, *placeth himſelfe before the right file-leader* of *Pikes*: the reſt all falling beyond him: nevertheleſſe, becauſe I conceive it not to be ſo good a way as that already ſhewn, I will not trouble you with it: but come immediatly to the *reducement* of this, which is as followeth. Command your *Pikes* to ſtand, and your *Muſquets* to *double* their *front* by *diviſion*: but if you want roome to doe it, then firſt *double* your *files* to the *contrary hand* of that, which you *doubled* your *Ranks*; and ſo having *doubled* by *diviſion*, as aforeſaid, they will be *reduced*, as at firſt.

If the Pikes charge the Muſquettiers muſt give fire kneeling on the ground.

Another way of placing the Muſquettiers on this firing.

The reducement.

CHAP. LXXXI.

Of the Broad or long-fronted-Battell, with the wayes of firing upon it.

THe *broad or long-fronted-Battell* muſt needs be of ſpeciall uſe, for many occaſions, either *offenſive* or *defenſive*. Which becauſe it is ſo apparant to all, I ſhall not need to ſtand to reaſon with any; rather deſiring to ſhew the manner of *making* and

reducing

reducing it; which is as followeth: Cauſe your *Pikes* to *ſtand*, and your *Muſquettiers* to *march*, untill the *Reer-rank* of the *Muſquettiers* be *advanced* a little before the *firſt-rank* of *Pikes*; then let the *Muſquettiers face inward*, (or in *oppoſition*) and *cloſe their diviſions*; and then *face to their Leader*. And if you would bring more *hands* to *fight*, *double Ranks* to any *hand*, and the *Body* (for *form*) will ſtand like the *Figure* here next following. But the *ſpeedieſt way* (and I think the beſt, I am ſure with *expert Souldiers*) is to * *wheele* both *flanks* into the *Front*, which is the *way* intended by this *Figure*. For the manner of the *Firing* it ſelfe, you may partly perceive that there are *Intervals* made for each *diviſion*, to *wheel-off* to the *right*, that ſo they may either fall in the *Reere* of the *Muſquettiers*, and there continue the *Firing*; or elſe fall in the *Reere* of the *Pikes*, and be thereby *ſecured* from the *Horſe*. It may be done one or both wayes, according to the *occaſion* or *diſcretion* of the *Commander*. Nevertheleſſe, before I ſhew the *Firing*, obſerve theſe words of *Command*, which produce the *Figure*:

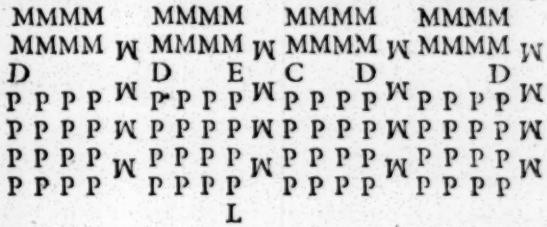
Direction to make the Broad-fronted-Battell.

**This wheeling is intended but for a ſingle Company; for if there be more Companies, then the way firſt ſhewn is farre the better.*

Wheele your Flanks into the Front. *Face to your Leader.*

The broad-fronted-Battell.

Front.



The *firſt-rank* having *preſented*, and *given fire*, let them *wheel-off* to the *right*; all paſſing down the *Intervals* to the *right*, and placing themſelves in the *Reere* of their owne *diviſions* of *Muſquettiers*: the next *Ranks* of *Muſquettiers* making good their *leaders ground*, *firing*, *wheeling-off*, and placing themſelves as before. Having *fired* once or twice over this way, a ſecond way may be to place themſelves in the *Reere of their Pikes*, either *ſtanding* or *advancing*: the *Pike-men*, in the mean time, *clouding the clear skie*, with their *airy Armory*. The *Muſquettiers* having all *given fire*, and placed themſelves in the *Reer*, if need be, the *Pikes* may *cloſe* their *diviſions*, and *charge over-hand*: and if the Enemy ſhall ſtill preſſe forwards, the *Pikes* may *charge at the foot*, the *Muſquettiers giving fire* over them, or by *Extraduction*, as in the laſt Chapter.

The direction for the Firing.

A ſecond way of placing the Muſquettiers, upon this Firing.

For *Reducement*, there are divers wayes by *Firing*; but becauſe I would make every thing ſo plain and eaſie, that thoſe that read for inſtruction, may receive benefit, it hath cauſed me to *reduce* each *Figure* by it ſelfe, and not to multiply one upon another, whereby to make them too ambiguous: And therefore, if you make this *Figure* by *wheeling your Flanks into the Front*, and then *fire*, as afore-ſaid, the *Reducement* may be, either to * *fire* them over again, and ſo to fall into their former places; and then to *wheel your Flanks into the Front againe*: and laſtly, *face-about to the right*, and they will be as before. Or elſe, if you would *reduce* them without *giving fire* over again, then command your *Muſquetiers*,

The Reducement.

**Note that the ſecond Firing will cauſe the Body to face the Figure*

to the Reere, which then becomes a Front-accidentall, and is the cauſe that the ſame command reduceth which firſt made it.

tiers to *double your Front by diviſion*; that done, *wheel both Flanks into the Reere*, then *face to your Leader*, and command your *Muſquettiers* to *double your Front by diviſion again*, and they are as at firſt. If I ſhould proceed to ſhew the many and ſundry wayes of *Firings*, which may be done in *Front*, my Book had need to have as many *leaves* as *lines*; and yet all too little. But that I may keep my ſelfe to my *promiſe*, and my Book to its *compaſſe*, I will next come to ſhew ſome *Firings in the Reere*; and amongſt my *Diviſionall Firings* I ſhall inſert ſome other ſorts of *Front-Firings*, which here I have omitted.

CHAP. LXXXII.

Of Diſ-martching, or Firing in the Reere: the ſeverall wayes, and how they ought to be performed.

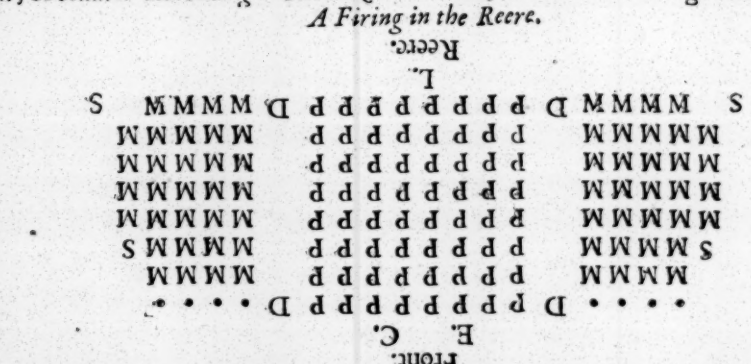
* *The benefit and uſe of firing in the Reere.*

HAving ſo long maintained *Battell* in the *Front*, I will now *face* them *about*, and ſee how they will behave themſelves upon their *Firings* in the *Reer*. Which kind of * *Firings* may be very *beneficiall* and *ſerviceable*, many wayes. For by keeping an orderly *Martch*, and *Firing* in the *Reere*, the eager *Enemy*, by too haſty purſuit, may be diſordered. Or, if it ſo happen, (as many times it doth) that you have a *diſadvantagious* place to *imbattell* on, by this *Firing* you may *martch away*, ſtill preſerving your *order* and *aray*, untill you have brought your *Adverſary* into ſome *ambuſhment*, or ſuch like *inconvenience*.

* *Wayes to come to firing in the Reere.*

For the * manner of coming to the *Firing*, it muſt either be by *facing-about*, *wheeling-about*, or *counter-martching*: The *Pikes* are to be *ſhouldered*. The *Figure* followeth:

A Firing in the Reere.



The direction for this firing in the Reere.

The *Body* being upon a *martch*, if the *Enemy* appeare in the *Reere*, let the *laſt-rank* of *Muſquettiers face-about*, and *give fire*; then *wheel-off* by *diviſion*, *file-wiſe*, *martching-up* toward the *Front*, and there placing themſelves before the *fore-moſt Ranke* of *Muſquettiers*, (the *two out-moſt men* of each *Rank* being the *leaders-up* of thoſe which have *fired*) who are the firſt that take their places on the *out-ſide*, the reſt *wheeling-about* them, and *ranking-even* with them on the *inſide*; ever obſerving, that they *range-even* with the *ſecond-rank* of *Pikes*. The reſt of the *Muſquettiers* alſo doing the like: and in this manner to continue the *Firing*, as occaſion ſhall require. Nevertheleſſe, of all the *Figures* and *Firings* that ever I have ſeen, this hath been the *worſt* performed in all places: which might eaſily be amended, if the *Souldiers* would obſerve this following direction; namely, when the *laſt-rank* of *Muſquettiers* have *preſented* to the *Reere*, and are *giving of fire*, the *Rank* which *martched* next before them, doe then * *blow*, *open*, and *preſent*, at three *motions*; ſtill keeping along *even with the Body*, untill that (laſtly) they *preſent* to the *Reere*; by which time, the *Rank* that *laſt fired* will be *wheeled-away*. The next *Rank*, ſo ſoon as the other

Note upon all firings in the Reere, to blow your coale ſtepping forwards with your right-foot. Open your pan ſtepping forwards with your left-foot; (a little inclining to that hand to which you are to face-about.) Preſent to the Reere ſtepping forwards with your right-foot.

hath

hath *preſented*, is likewiſe at *three motions* to doe the ſame: and ſo ſucceſſively, for all the reſt; every *ranke* obſerving, upon each *rankes firing*, to *loſe* one; and to *martch* one *ranke* neerer to the *reere* of the *battell*, that ſo that part may ſtill be kept firme and abſolute.

This *giving* of *fire* towards the *reere* for *ſervice*, is to be continued according to the quality of the *place*, the *occaſion* for *fight*, and the diſcretion of the *Commander*. In *exerciſe* we commonly do it but once over; and then (if you pleaſe) you may make *Alt*, and *face* your *body about*, *giving fire* over again: and charging your *Pikes* upon it, if need ſo require, or at diſcretion of the *Commander*. Notwithſtanding, if the *Horſe* ſtill purſue you in the *reere*, you having gained ſome *ſtrait*, or *place of advantage*, may* *wheel* your *flanks* into the *front*, then *face* to the *reere*, and with your *charged Pikes* defend your *Muſquettiers*: which (the *body* being ſo *wheeled*) will be in the *reere*. The *body* ſtanding in this *form*, the *Muſquettiers* may *ſleeve-up* by way of *Extraduction*. The *manner*, you may perceive in the* *Chapter* which treats of that *figure*. If the *Horſe* ſtill preſſe forwards, cauſe the *Pikes* to *charge* at the *foot*; the *Musquetiers giving fire over them*, as in the **Convex half-moon*. Laſtly, to * *reduce* them, having thus *fired*, *command* them to *wheel their flanks into the front*, and to *face-about*, after their proper *file-leaders*, and they are *reduced*. * Sometimes, we *give fire* in the *reer*, having all our *Muſquettiers martching* in the *reer* of the *Pikes*. For the *manner* of the *motion*, it is as before: but for placing of the men, after they have *fired*, it may be different. As, to *wheel-off* by *diviſion*, placing themſelves in the *front* of the *Muſquettiers*, next behind the *reere* of the *Pikes*. Or if the *body* be large, to *wheel all off to the right*, *through Intervals*, and ſo to *martch into the front of Pikes*. Or elſe they may *wheel off by diviſion*, and *flank their Pikes*, and ſo *fire over againe*; as before. If you have brought your *Muſquettiers* (by *firing* to the *Reere*) before the *front* of *Pikes*, then to *reduce* them, you may either *wheel* the *body* about, and *give fire* in *front*, cauſing your *Muſquettiers* to *fall-off by diviſion*, and to *flanke* their *Pikes*, as you may perceive by the figure of the* *Demy-hearſe*. Or elſe, if you will *reduce* them without a *firing*, cauſe your *Muskettiers to open to the right* and *left*, and the *Pikes to martch-up in the midſt*: after which *facing* all to your *firſt-front*, they are as at firſt. I might have ſhewn a Figure for each of theſe ſeverall *firings* in the *Reer*, which would have delivered them with more variety: but I conceive that this here already expreſt, may ſuffice: eſpecially this being the ground of what may be ſpoken. Concerning *firings* in this nature, many men are of many minds, about this *firing* in the *Reer*. Some will have it, that the *laſt ranke*, ſhall at one *motion*, *face* to the *reere*: and there *preſent*, and *give fire*. Others will have it at two *motions*, but either of them have their inconveniences. For however they pretend *ſudden execution*, they are deceived: for would they make triall, by cauſing the *Muſquettiers* of one of the *flanks* to *give fire* at one *motion*; and the *Muſquettiers* of the other *flanke*, at *three motions*, (as I have here ſet downe) they ſhould ſoon find that the *firing* upon *three motions* were the beſt: and that the other would be caſt ſo far behind their *Body*, that they would be in ſome danger to be cut off. Beſides this, they are longer in *cleering* themſelves from their owne men, which all the while muſt ſtay, untill they are *martched-off*: or elſe kill them, in ſtead of the enemy, whereas in this other *firing* upon *three motions*, they ſtill *keep along* with their *body*, doing their *execution* more ſuddenly and more ſafely. Nevertheleſſe there be many ſo much wedded to their own wilfull opinions, that they will more willingly perſiſt in a knowne errour, then be ſeen to alter, what they have ſeemed to maintaine. But leaving ſuch to ſteer by their own compaſſe, I will here conclude my *firing* in the *reere*. And the next I ſhew, ſhall be *firings* in *flanks*: to which purpoſe, I paſſe all my *Muſquettiers* to the *right-flank*. The words of direction for it are theſe.

Muſquettiers of the right-flanke, open to the right (or face to the right, and martch.)
When they have opened to a ſufficient diſtance, then ſtand.

* *Wheeling of the flanks into the front or reere, is moſt uſefull for ſmall bodies.*

* *Chap.* 80.

* *Chap.* 79. *The reducement.*

* *A ſecond order of firing in the Reere.*

A reducement for this way of firing in the Reere.

* *In cap* 76.

Many differing opinions concerning firings in the reer.

Firing at three motions to the reere the beſt.

There is no error, which hath not ſome ſlippery and bad foundation, or ſome appearance of probability, reſembling truth.

Muſquettiers of the left-flanke, paſſe thorow between your ranks of Pikes, to the Intervall on the right-flanke: Then ſtand, and face all to your Leader.

CHAP. LXXXIII.

Of Firings in flank, in generall, and more particularly, of the gathering firing.

THe *Muſquettiers* being all on the *right-flanke*, (as in the laſt Chapter is directed) it would be needleſſe to make a Figure, whereby to demonſtrate the ſtanding of the Body, ſeeing that none can be ſo ignorant, but muſt needs know that all the *Muſquettiers* being upon the *right*, the *Pikes* muſt be upon the *left*. Nevertheleſſe, I ſhall endeavour to ſhew what is meant by *firing in flanks*. (Which for the generall) are of theſe two kinds. The firſt is, when the *enemy skirmiſheth with us in flanke as we martch*, the other when as by ſome ſudden attempt or ambuſhment, the *party*, *diviſion*, or *whole Body* is engaged, and ſo forced to *ſtand*, and *face* to the *right*, or *left*, or both: By which *facings*, the *flanks* become *fronts accidentall*, and their *firings* will be after the ſame manner of the *firings in front*. Wherfore ſeeing I have already ſpoken ſufficiently of them, I will now ſhew *firings in flanks*, *martching*; the particulars whereof are as followeth. * The firſt is for the *outmoſt-file* to *give fire*, and ſtand, untill the next *file* have *fired*, which by ſome is called, the *gathering Firing*. Secondly, *Firings* in *flanke*, and leading them up between the *Muſquettiers* and *Pikes*. *Firing* in *flanke*, being led off by the *bringers-up*. *Firings* in *flanke*, ſleeving up on the contrary *flanke* of *Pikes*. *Firing* in *flanke*, and drawing them up between the *innermoſt files* of *Pikes*. * All theſe *firings in flank*, are to be performed upon a *martch*, the *Pikes* are to be *ſhouldred*. Our firſt *firing in flanke* followeth.

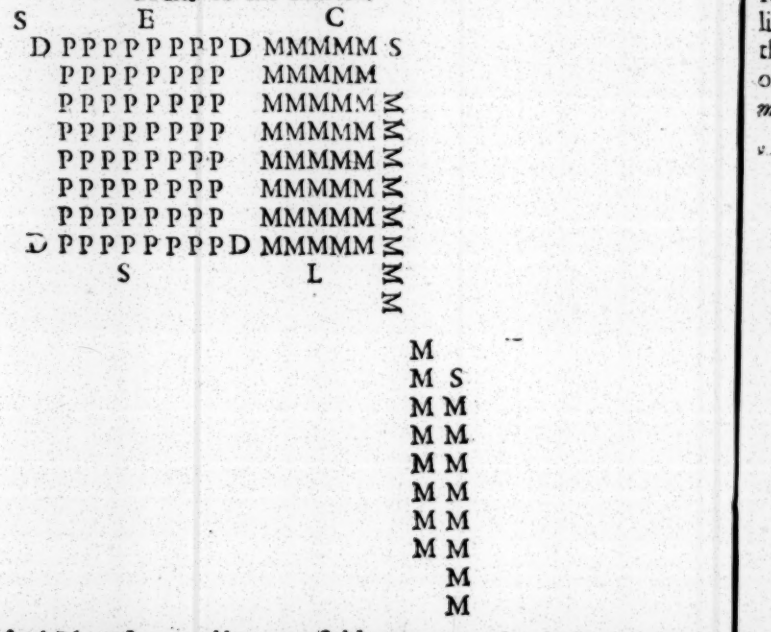
What is meant by firing in flanke.

**The divers and ſeverall wayes of firings in flanke martching.*

**Upon all theſe firings in flanke martching, the Pikes are to bee ſhouldred.*

The Command is, *Muſquettiers, give fire to the right: and gather up your Files.*

Front of the Martch.



This *firing* on the *flank*, I have ſeene, and known uſed, by many good and able Souldiers. Nevertheleſſe, in my opinion, the men ſtand in a great deale of danger, when having *given fire*,

fire, they can doe no good, but ſtand like ſo many marks for their *Enemies* ſhot. Notwithſtanding, it may be that ſuch, whom I have frequently ſeen to uſe it in their practice, may be able to render good reaſons for the ſervice; though as yet I cannot conceive it. I will therefore forbeare any further to proſecute my opinions, and ſhew the manner of execution; which is to be performed as followeth: The *Command* being given to *Fire to the right martching*, preſently the *outer-moſt file* to the *right faceth outward*, and *preſents*, the reſt of the *Body* ſtill *martching* forwards: Then the *preſented File gives fire*, and ſtands, *facing* again to their *firſt-front*: By that time, the *Body* will be *marched* clear of the ſtanding *File*, then the next *outer-moſt file*, *preſents* and *fires* in like manner, the *Body martching* as before: Having *fired*, they in like manner *face* to their *firſt-front*, and ſtand; a *Serjeant* leading-up the *File* that firſt *fired*, on the *out-ſide* of the *File* that laſt *fired*: then they ſtand both together, untill the third *File* hath *given fire* after the ſame manner; and then the *Serjeant* leads-up the two *Files even* with the third, which laſt *fired*. After this manner the ſeverall *Files* of *Muſquettiers face* to the *flank*, *give fire* ſucceſſively, and ſtand, untill the *Serjeant* leads-up the reſt of the *Files*, which formerly *fired*, *even* with the *Front* of the *File* which laſt *fired*. Thus having all *fired* over, they are to *martch-up* again, *even* with the *Front* of *Pikes*, and this *reduceth* them, as at firſt.

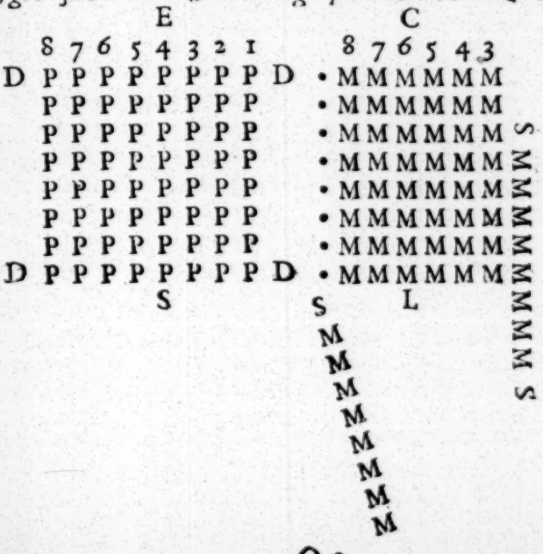
The direction for this firing.

CHAP. LXXXIV.

The ſecond manner of giving fire to the Flank.

IF you would *fire* in *flank*, a more ſecure way then that laſt ſhewen, take this way of *Firing*; the which ſhall be full as *ſerviceable* for matter of *execution*, and ſhall farre precede it in way of *preſervation*, both in *ſecuring* the *Muſquettiers* (after they have *fired*) from the danger of their *Enemies ſhot*, as alſo in continuing the *Body intire* without ſeparation. It is eſpecially uſefull, when two *Enemies* are *divided by a River*, or by ſome ſuch like meanes ſecured from the *incurſions* of the *Horſe*: For then, by this way of *drawing* the *Muſquettiers* up between the *inner-moſt file* of *Muſquettiers*, and the *outer-moſt file* of *Pikes* to the *right*, your *Battell* may be continued according to the occaſion, or the *Commanders* diſcretion. The *Figure* followeth: The *Command* is,

Muſquettiers, give fire in Flank, martching-up between the Pikes and Muſquets.



The direction for this firing.

The way to performe this *Motion* of *Firing*, is as followeth: The *outer-moſt file* being commanded to *face to the right*, and *preſent*, the reſt of the *Body martcheth* away, as in the other *Figure*, and the ſtanding *file gives fire*. This done, and that the *Body* is *martched* cleare of the ſtanding *file*, the next *file preſents* to the *right*, and the *file* that firſt *gave fire faceth* to the *firſt-front*, and is led by a *Serjeant croſſe the Reere of Muſquettiers*, and up betweene the *Muſquets* and *Pikes*; the *Muſquettiers* are ſtill to *open* to the *right*, as they *martch*, that ſo there may be *roome* for one *file* to *martch-up* betweene them and the *Pikes*. And ſo (ſucceſſively) each *File* having *fired*, *martcheth-up* next unto the *right-flank* of *Pikes*. When all your *Muſquettiers* have *given fire* once over, they are *reduced* as at the firſt. The *Battell* may be continued, at diſcretion. The next *Firing* in *Flank* (for the manner of *execution*) will be all one with this; the difference will be in the *wheeling-off*, and *placing* the *Muſquettiers* after they have *fired*.

The firing being performed once over, they are reduced as at firſt.

CHAP. LXXXV.

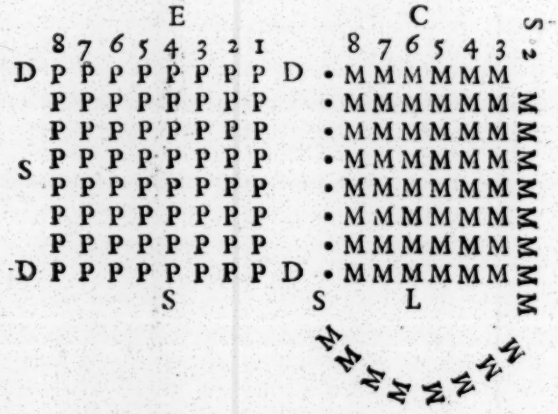
A Firing in Flank, led-off by the Bringers-up.

THe next *Firing* in *Flanke*, which I propound to your peruſall, will be nothing differing for *manner* of *execution*, from the *Firings* in *flank* formerly ſhewed: The onely *difference* ariſing between them, is, That the *other Files* of *Muſquettiers*, after that they had *given fire*, were *led-off* by their *proper-File-leaders*; and this, to the contrary, muſt be *led-off* by their *Bringers-up*. And this indeed, if the *Body* be upon a *ſlow Martch*, is the *readieſt* and *quickeſt* way; and doth more ſpeedily ſecure the *Muſquettiers*, after they have *given fire*. The words of *Command* and *Direction* which produce the *Firing*, are as followeth:

The uſe of this firing in flank.

Muſquettiers, give fire to the right, wheeling-off after your Bringers-up, and placing your ſelves between your diviſions.

Front.



The direction for the Firing.

For the manner of *execution*, or way to perform this *Firing*, it is as followeth: The *Body* muſt be conceived to be *martching*, upon all theſe *Firings* in *Flank*, and that with their *Pikes ſhouldred*: This being preſuppoſed, the *Command* being given, the *outer-moſt file*

file preſents to the right, and *gives fire*; then *faceth to the right*, after their *Bringers-up*, who leadeth them off, croſſe the *Reere* of *Muſquettiers*, *martching them up* between the *diviſion* of *Pikes* and *Muſquettiers*, the *Bringers-up* ſupplying the *File-leaders* place, and *martching even* in *Rank* in the *Front* with the *File-leaders*; the *File-leader* of the ſame *file* becoming the *Bringer-up* in the *Reere*. The *files* of *Muſquettiers*, or *Pikes* (according as the *Command* ſhall be given) are, as they *martch*, to *open*; thereby giving way to the *Muſquettiers*, after they have *fired*, to *come-up* between the *diviſions*; and ſo ſoon as the *firſt-file* that *fired* is cleare from the *right-flanke*, the *ſecond-file preſents*, and *fires*; in like manner *wheeling-off*, as before, and *martching-up* between the *Pikes* and *Muſquettiers*; every *file* ſucceſſively *giving fire*, and *wheeling-off* as afore-ſaid. This *Firing* may be performed *once*, *twice*, or *oftner over*, according to the diſcretion of the *Commander*. Nevertheleſſe, if it be *twice* performed, the men are *reduced* as at firſt; every man having his right *place*. If you *fire* them but *once*, or *thrice* (or any odde number of *times*) over, then you muſt *counter-martch* your *Files* of *Muſquettiers* to *reduce* them. There is another way for the *Bringers-up* to *wheel-off*, and each of them to *lead-off* his *File*, untill hee comes to the *Reere* of the *diviſion* which is between the *Muſquets* and the *Pikes*; and there hee is to *ſtand*, and *rank* with the *Bringers-up*; the reſt that follow, *paſſing-on forwards*, by way of *Introduction*, and every man *ranking* before him that was his *leader* in the *wheeling-off*, untill the *proper-File-leader* be come into his *place* again. And after this *way*, they may *give fire*; each *Firing* being his own *Reducement*.

The firſt firing is reduced by doing the ſame over again.

Another way of placing the Muſquettiers, when they are led-off by the Bringers-up.

CHAP. LXXXVI.

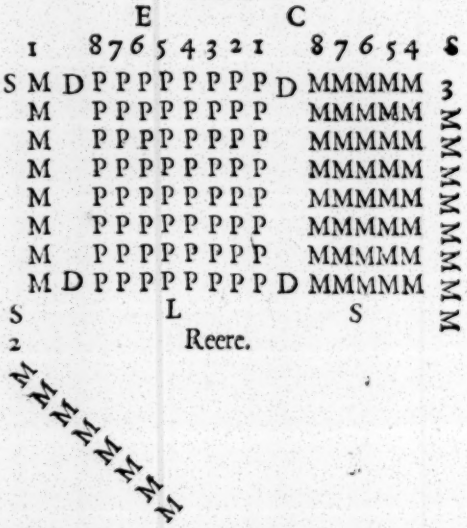
The differences between Firings in Flank, martching; and of bringing the Muſquettiers on the out-ſide of the Pikes.

ALl, or the moſt part of the *Firings* in *Flanke*, which are performed *martching*, in point of *execution*, are the ſame: the eſpeciall difference between them, being either in the *manner* of the *wheeling-off* after they have *fired*, or in the *materiall placing* them, whereby to make them more *offenſive* or *defenſive*. And this appeareth by the next following *Firing*; which is to be uſed at ſuch time and place when as there may be doubt of the *Enemies Horſe*: And therefore, for the more ſecurity of the *Muſquettiers*, after they have *fired*, they are to be *drawn-up* on the *outer-ſide* of the *left-flanke*; if * haply there may be ſome *hedge*, *ditch*, *river*, *hill*, *marſh*, *wood*, or ſuch like convenient *ſafe-guard*, whereby to ſhroud them from the *fury* and *violence* of the *Horſe*; that ſo the *Pikes* making *Alt*, and *facing* to the *Enemy*, may *charge*, and with their *armed points* (ſtrongly and cloſely coucht) *receive* and *abate* the *fury* of the firſt *ſhock*. [a] And, if need be, the *Pikes* may all *charge* at the *foot*, cloſely *ſerried* together, with their *ſwords* drawn, and the *Muſquettiers* may *give fire* over them. But leſt I *anticipate* my ſelfe in ſhewing the *uſe*, I will returne to ſhew the *manner* of the *Firing*, intended by this following *Figure*: Onely firſt take the *words* of *Command* and *Direction*, which are as followeth;

* *Scituation of place, often affords good help in time of need, to the artfull and induſtrious Souldiers.*

[a] *Or elſe a better way is, to give fire by extraduction; as in* Chap. 80.

Muſquettiers, give fire to the right: placing your ſelves on the out-ſide of the left-flanke of Pikes.



The direction for this firing.

The *outermoſt files* having *preſented* to the *right*; the reſt of the *body* continueth the *martch*, whileſt they in the mean time are *giving fire*. Which being done, and the *body cleer*, the next *outermoſt file preſents*: the *file* that *laſt fired*, in the interim, *facing to the left after their proper file-leader*; who *leadeth* them croſſe the *Reer* (both of *Muſquets* and *Pikes*) a prettie round pace, *fleeving-up* on the out-ſide of the *left-flanke* of *Pikes*. The next *file* having in like manner *fired*, doth alſo *troop-up* on the out-ſide of the *file*, led off before; every *file giving fire*, and doing the like. When all have *given fire*, and are *cleared away*, then the *Pikes* may charge; which is very neceſſary to accuſtome the *Souldiers* unto in times of *exerciſe*, both for *charging on*, and *retreiting*, as alſo to puſh with their *Pikes*, that ſo by practiſe they may be able to doe it *orderly*, either way: ſtill keeping their *order* and *array*. Having *given fire* upon the *right-flanke*, and drawn all your *Muſquettiers* in this manner to the *left-flanke*, if you will cauſe them to *give fire* on the *left-flanke*, and bring them backe againe to the *right-flanke*, they will be *reduced*. Or if you would reduce them without a *firing*, then either paſſe your *Muſquettiers* thorow betweene your *ranks* of *Pikes*, or elſe let your whole *diviſion* of *Muſquettiers* be drawn croſſe, either the *front* or *reere* of *Pikes*, into their places: or by *diviſion* (if you pleaſe.) Your *Muſquettiers* alſo may *give fire* in *flanke*, the *firſt file fleeving up* on the *left-flanke*; the reſt of the *files*, ſtill falling between the *Pikes*, and the *Muſquettiers* which *wheeled-off* the laſt before them. And this is alſo a very good *firing*, and may be *reduced* with doing the like back again, and many other waies: they may alſo *fall-off* after the manner of the *Figure* laſt ſhewn: being *led* by their *bringers-up*, either into the *front*, or elſe after the manner as is diſcourſed in the latter end of the laſt Chapter. But I endeavour all I may, to contract my matter, leſt my *Volume* ſhould exceed my intent. And therefore I will ſhew but one *firing* more in *flanke* upon a *martch*, wherewith I will conclude theſe ſorts of *Firings*.

It is good to accuſtome the Pikes to charge.

They may be reduced by interchanging of flanks.

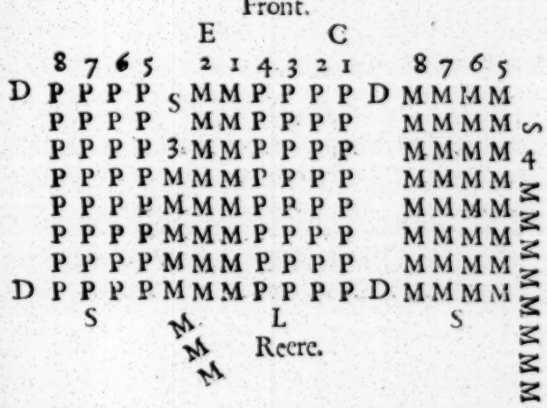
CHAP.

CHAP. LXXXVII.

Of Firing in flanke, and placing the Muſquettiers in the midſt of the Battell of Pikes: with other Firings from thence proceeding.

Firing in *flanke*, and bringing them *off* between the midſt of *Pikes*, is to be uſed at ſuch time, when as you would ſecure your *Muſquettiers*: the place (otherwiſe) affoording no *naturall convenience* of ſuccour, ſuch as I have formerly ſpoken of: and therefore by this manner of *falling-off*, where we want *naturall aſſiſtance* in the *ſcituation*, there *art* ought to ſupply us; namely, by contriving to bring up the *Muſquettiers* betweene the *Pikes*, and ſo to defend them from the fury of the *Horſe*. And, if need be, you may *draw* 3. or 4. *Files* of *Pikes* (more or leſſe, according to your *number*, or the *danger*) *croſſe* the *Muſquets* both in *front* and *reere*, which are in the midſt between the *Pikes*, which will as well preſerve the *Muſquettiers* in *front* and *reere*, as in *flanks*. But leaving further to diſcourſe, what may be done; I will now ſhew how this is to be done. Onely firſt take the *words* of *Command* and *direction* for the *firing*, as followeth. *The uſe of this firing.*

Muſquettiers, give fire to the right: martching up between the midſt of Pikes.



The *Command* being given, for the *outer-moſt file* to *preſent* to the *right*, as (formerly in the other *firings* in *flanke*) the reſt of the *body* ſtill *martcheth* on, untill that the *outer-moſt file* hath *fired*, and is *faced* to the *left* again, following their *leader*. He now leading them *off* to the *left*, *martcheth-up*, betweene the *middle-moſt files* of *Pikes*; who are then to *open* to the *right* and *left*, ſo to give them roome to *martch-up* between them: In the meane time, the *next file* having *given fire*, *wheeleth-off* in like manner, *martching-up* on the *left* of the *file*, which *fired* laſt before them. And ſo ſucceſſively, for all the reſt of the *files* of *Muſquettiers*, all which are to *give fire*, and to *wheel-off*, as aforeſaid, placing themſelves ſtill on the *left* of the *files* which *laſt fired*. Wherein is ſtill to be noted, that the *files* of *Pikemen* are ſtill to open to the *right* and *left*, and that for the receiving of the *Muſquettiers*, after that they have *given fire*. This *Firing* (as all other the *Firings* in the *flanke*) may as well be *led-off* by their *bringers-up*, as by the *file-leaders*: and then the *reducements* will be anſwerable. The *Muſquettiers* having all *fired*, the *Pikes* may *charge* at diſcretion. The *Bow-Pikemen*, which are in the *reere* of the *Muſquettiers*, in the meane time not ſparing to ſend their *ſhowers* of *arrowes* amongſt the thickeſt of their *Enemies*, and if need require, the *front* of *Pikes charging* at the *foot*, with their ſwords drawn; The *Muſquettiers* may *give fire over them*, *ranke* after *ranke*; for the *foremoſt ranks* having *fired*, may kneele upon the ground; and there *make ready* again: untill the other *ranks* behind *The direction for this firing.*

Whileſt the firſt diviſion of Pikes charge, the reer diviſion of Pikes (having bowes) may doe good ſervice againſt the horſe.

hind them have likewiſe *given fire*. After this manner the *Battell* may be continued; according as occaſion ſhall require. For *Reducement*, and to bring the *Muſquettiers* into both *Flanks* again, as they were before I began theſe *Firings* in *Flanke*; Command your *Pikes* to *face-inward*, and your *Muſquettiers* to the *right* and *left out-ward*, and ſo to paſſe thorow, and *interchange ground*; then *facing* them to their *Leader*, they will be *reduced* as at the firſt. I would have the ingenious *Reader* to conceive, that all theſe *Firings* in *Flank* may as eaſily be performed to the *left*, and with the ſame *words*: only, the *words* of *Right*, muſt be changed for *Left*; and *Left* for *Right*. I might have further enlarged my ſelfe upon *Firings in Flanke*, but theſe already expreſt, may ſuffice for to inſtruct the ignorant. As for the skilfull and experter ſort of *Souldiers*, I ſhall rather requeſt their approbation, than preſume to write ought which may ſeem to paſſe me with the leaſt conceit tending to their inſtructions. Wherefore, for the further proſecution of my intended diſcourſe, I will next ſhew ſome *Diviſionall Firings*. And (for *method* ſake) I will firſt begin with *Firings in Front and Reere*: which may be performed either *martching* or *ſtanding*. And to that end, ſuppoſe your *Muſquettiers* to *martch* all in *Front* and *Reere*. Nevertheleſſe, becauſe it will not be amiſſe to ſhew with what *words* of *Command* and *Direction* the *Muſquettiers* may be brought thither, therefore take notice from what part of the *Body* they are taken: And if they be in the *midſt*, (as by this laſt *Firing* in *Flanke* they were brought) then *command* the *halfe-files* of the *Muſquettiers to face-about*; which done, let the *Pikes ſtand*, and the *Muſquettiers martch*, untill they are *cleare* both of *Front* and *Reere* of *Pikes*; then let them *ſtand*, and *face* to their *Leader*: which being done, your *Battell* will ſtand in *form* of an *hollow ſquare*: In which *hollow*, may be conveyed any *carriage*, or ſuch like. But if you will not have your *Battell hollow*, then *command* your *Pikes* to *cloſe* their *diviſions*, and the *Muſquettiers* will be all in *Front* and *Reere*. If your *Muſquettiers* be on the *Flanks*, and you would bring them into the *Front* and *Reere*; then, after the ſame manner, let the *halfe-files* of *Muſquettiers face* to the *Reere*; and then, both *halfe-files* of the *Front* and *Reere*, *martch*, untill they are cleare of the *Angular Pike-men*: This done, let them *face* in * *oppoſition*, and *cloſe* their *diviſions*; after which, having *faced* all to their *Leader*, they will be rightly placed: namely, the *Front-halfe-files* of *Muſquettiers* before the *Front* of *Pikes*. Thus will the *Battell* be ſomewhat near the *form* of an *Hearſe*, and the *Muſquettiers* be ready to *give fire* to the *Front* and *Reere*, either *martching* or *ſtanding*. But before I begin my *Diviſionall Firings*, I would intreat you not to expect, that I ſhould *reduce* every particular *Firing* ſo ſoon as it is performed, as I have done by theſe hitherto ſhewed; but rather let it be ſuteable to your likings, that I *reduce Firings* by *Firings*; ſometimes *giving fire* upon a *Martch*, ſometimes upon a *ſtand*, ſometimes to the *Front* and *Reere*, ſometimes to both *Flanks*. I doe the rather deſire to goe in this way, becauſe thereby I may expreſſe far more matter in fewer lines, and ſhorter time.

The reducement.

The direction how to bring the Muſquettiers to the Front and Reere; either from the midſt or flanks.

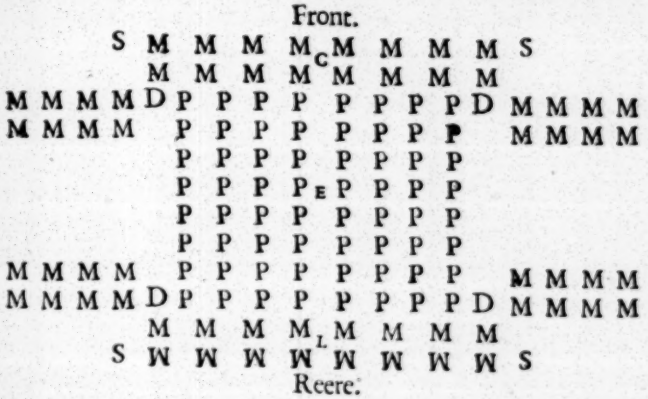
* *That is, the Front-halfe-files of Muſquets face inward, and the reer-halfe-files of Muſquettiers face inward; then cloſe together, before the Front and behind the Reere of Pikes. Your Figure takes the denomination of a Hearſe, when the depth doth manifoldly exceed the length, which muſt be thrice at leaſt.*

CHAP. LXXXVIII.

Of Firing to the Front and Reere, upon a Martch.

THe *Muſquettiers* being all placed in the *Front* and *Reere* (according to the directions in the laſt Chapter) I will now ſhew the manner of *Firing* to the *Front* and *Reere*, upon a *Martch*. Which howſoever that it may be rare, and ſeldome uſefull in ſervice, yet it muſt needs be excellent for *practice*: For by the often uſing it, the *Souldier* may be made capable of any *Firing*. The *Pikes* (you are to underſtand) are to be *ſhouldred*. The Command for the *Firing* is,

Muſquettiers, give fire to the Front and Reere, and flank your Pikes.



The *Command* being given (as above-ſaid) the *firſt-rank preſents*, the *laſt-rank faceth-about to the Reere*, and doth the like; and ſo both *giving fire* together, *wheel-off by diviſion*; the one *halfe* of the *Rank* following after the *right-hand-man* of the ſame *Ranke*, the other *halfe* after the *left-hand-man*, who leads them cloſe down by the *ſide* or *flank* of the *Muſquettiers*, untill they come to the *Pikes*. The *firſt-rank of Muſquettiers now ranking even with the firſt-rank of Pikes*; *the laſt-rank of the Muſquets, with the laſt-rank of the Pikes*; leaving a ſufficient *intervall* betwixt them and their *Pikes*, for the other *Muſquettiers* to *martch* between. And here you muſt note, that he that was *outer-moſt* when they *gave fire*, muſt likewiſe be *outer-moſt* when they have taken their *places on the Flanke*. The *firſt* and *laſt-ranks* having *fired* and *wheeled-off*, the next *Ranks* (*martching-on* as before, the *firſt-rank eight or ten paces before the Front*, the *laſt-rank* at *three ſteps to the Reere*) are in like manner to *preſent*, and *give fire*, *wheeling-off* by *diviſion*, and paſſing between the *diviſions*, [a] there placing themſelves, they of the *Front-diviſion behind* thoſe which *fired* laſt *before* them, and they of the *Reere-diviſion before* them which *fired* laſt *behind* them; and ſo they may continue to *give fire*, untill they have all *fired* once over. Then may the [b] *Body make a ſtand*, and the *Pikes charge to the Front and Reere*, if need be: Or if the *Commander* would continue his *Firing* to the *Front* and *Reere* ſtill, upon the ſame *Figure*, then let the *Muſquettiers* of the *Front* place themſelves (after they have *given fire*) *behind the Muſquettiers of their owne diviſion*; thoſe of the *Reer-diviſion*, placing themſelves *betwixt the Reere of Pikes, and the Muſquets of their owne diviſion*; and ſo the *Body* moving but ſlowly forwards, they may continue the *Firing*. Having *given fire* to the *Front and Reere*, and *flanked their Pikes*, if the occaſion offer, or the *Commander* pleaſe, they may *give fire* to the *Front and Reere* upon that *Figure*; which indeed I hold the better: as you may perceive in the enſuing Chapter.

The direction to the Firing: wherein you are to note, that the Muſquettiers who are to fire in Front, are to move nimbly 8. or 10. paces before the reſt of the Body, that ſo they may have fired and wheeled away before the reſt of the Body be ſo farre advanced. But if your Body be large, ſend a diviſion before, which will be the better way.

[a] *Note this direction.* [b] *If need be the Body may make Alt, and charge to the Front and Reere.*

CHAP. LXXXIX.

A ſecond way of Firing to the Front and Reere.

THis ſecond way of *Firing* to the *Front* and *Reere* upon a *Martch*, may eaſily be performed, if the *Souldiers* be well and often inſtructed: Without which, all matters in the *Art Military* will ſeem difficult; and by which, all things will be made facile and eaſie. I could inſtance in divers *Motions* and *Figures*, by ſome reputed ſuperfluous niceties;

which were the true uſes known to the *Commander*, and the way to execute to the *Souldier*, would be found to be of ſingular good ſervice. Nevertheleſſe, becauſe to the * *Ignorant*, nothing beyond their capacities may ſeem excellent, many good and ſerviceable *Motions* are ſlighted, and not accounted fit for ſervice. But I could well wiſh, that ſome good courſe might be taken, that the *Souldiers* of our *Trained Bands* might have a little oftner *practice*, that ſo they might be able (at leaſt in ſome reaſonable way) to underſtand and *exerciſe* what ſhall be commanded them. But I have ſtrayed from the matter; and therefore take theſe words of *Command* and *Direction*, which being orderly executed, produce this *Figure* following:

* *Ignorant Souldiers account thoſe things nicetics which they underſtand not.*

Muſquettiers, give fire to the Front and Reere, placing your ſelves between your Diviſions.

Front.

E C

S M M M M D P P P P P P P D M M M M S
W M M M M P P P P P P P M M M M W
W M M M M P P P P P P P M M M M W
W W P P P P P P P W W
M W P P P P P P P W M
M M M M M P P P P P P P M M M M M
M M M M M P P P P P P P M M M M M
S W W W W D P P P P P P P D W W W W S

L

Reere.

The direction for this firing to the Front and Reere.

The way to performe this *Firing* is as followeth: (the Command being given) The *firſt-rank advanceth* 8. *or* 10. *paces before the Front of the Body, there preſenting, and firing: the laſt-rank of Muſquettiers, in the interim, preſenting at three motions to the Reere, and there in like manner firing:* which done, they are to *wheel-off to the right and left*, placing themſelves *between the Muſquettiers of their own diviſions.* Thoſe, namely, which were of the *Front-halfe-files*, falling into the *Reere* of their own *diviſion*; thoſe of the *Reer-halfe-files* (contrariwiſe) falling *before their halfe-file-leaders*, and *ranking-even* with the *halfe-file-leaders* of *Pikes*; the next *Ranks*, ſucceſſively, *firing* and *wheeling-off* after the ſame manner. *Having fired once over, they are reduced, every man to his place.* Theſe two laſt *Firings* to be performed upon a *Martch*, would ſeem very difficult to *unexperienced Souldiers*; but by often exerciſing they may be made capable of theſe, or of any other. Nevertheleſſe, the *ſpeciall uſe of this Firing* is for ſmall *Bodies, being charged in Front* and *Reere* by *diſbanded Squadrons*, or *ſmall parties:* But if your *Body* be *large*, the beſt way will be to ſend out a *conſiderable number* of *Muſquets* and *Pikes* before, *to beat-off the Enemy:* or if they be not able to beat him off, then to *hold him up*, untill you have *made good your Retreit*, and can either *reinforce* them with a *new ſupply*, or *relieve them* by bringing of *freſh hands* to maintain the fight.

The reducement.

CHAP. XC.

Firing to the Reere and Right-flank martching.

HAving already ſhewen *Firings in Front, Reere, and Flanks*, (ſome *martching*, and ſome *ſtanding*) I will now ſhew one *Firing* to the *Reere* and *Right-flanke*, upon a *Martch:* The which, without all queſtion, muſt be very ſerviceable, at ſuch times as the obſequious and vigilant Enemy ſhall find ſome opportunity to *skirmiſh with the Body*, ſeeking to annoy them in their paſſage or *martch*, *charging* them in the *Reer* and *Flank* at one

The uſe of this firing.

and

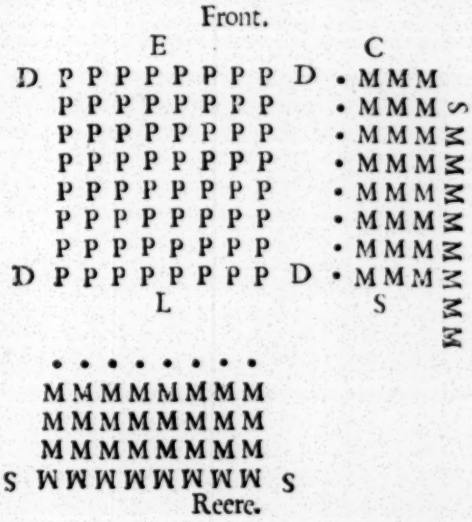
and the ſame time. I ſhall not need with arguments to enforce the uſefulneſſe of the *Firing*, for none that knowes any thing in the *Art Military*, but will ingeniouſly confeſſe, that in time of *motion, either advancing, or retreiting out of an Enemies Countrey*, they ſhall be ſure upon all *advantages* to be waited upon by Enemies, *charging in this nature.*

I might be infinite in examples of this kind, both ancient and modern, but my intent is not to write a Hiſtory, every houſe and ſhop being ſufficiently ſtor'd with Works of that nature; and my task being onely a few directions, for the better improvement of the exerciſe of *Foot-Companies*; the which I have hitherto endeavoured to keep my ſelfe cloſe unto, and not flown out into extravagant and *forraign* Diſcourſes: although I cannot deny, but that the ſeaſonable recitall and intermixture of *Hiſtory*, would much have *beautified* and *imbelliſhed* the *Worke*, as delivering it more fragrant to the ſenſe, and conducing, with more delectation, to the benefit of the memory. But it is not my intent to raiſe my labours to ſo large a Volume; nor indeed can I ſpend ſo much time from my more neceſſary affairs; but ſhall reſt well contented, to leave ſuch large labours to the abilities of the Learned, who with their artfull Inventions may be able to garniſh out their works with more attracting tearms; whileſt I, in the mean time, according to the meaſure of my talent, proſecute my enſuing Diſcourſes.

Wayes of firing to the Flank and Reere.

You may (if you pleaſe) fire to the Flank and Reere, your Muſquettiers being in their ordinary places, on the Flanks of their Pikes. Nevertheleſſe, a *ſecurer way* for the *Pikes* will be, to draw the *Muſquettiers from that Flank* which is in leaſt danger, *croſſe the Reer of Pike-men.* And this ſhall be the way I'le obſerve in this *Firing.* The words of *Command* are as followeth:

Muſquettiers, give fire to the Right and Reere, placing your ſelves between the Pikes and your own diviſions.



The *Command* being given (to *fire to the Reere and Right-flank*) the *outer-moſt file of Muſquettiers preſent to the Right, and the laſt-rank of Muſquettiers preſent to the Reere, both give fire*; the reſt of the *Body*, in the mean time, *martching* a reaſonable pace: The *right-hand-file and laſt-rank* having *fired*, the *file faceth* to the *left*, after their *File-leader*, and ſo *martcheth-up* between the *Muſquettiers* of the ſame *diviſion*, and the *Pikes*;

The direction for this firing.

If there be too many to wheele-off together, then make one intervall, or more as the occaſion requireth.

the *rank wheeling-off* to the *right*, and placing it ſelfe next after the *reere* of *Pikes*, and before the firſt *ranke* of *Muſquettiers* of the ſame *diviſion*. If you pleaſe, you may make an *Intervall* between the *Muſquettiers*: that ſo part may *wheel-off* to the *right*, on the *outſide*, and the other part *wheel-off* to the *right*, and *march-up* between the *Intervall* into their places. The firſt *file* and *rank* that *preſented*, having *given fire*, and *wheeled clear off the Body*, the next *File* and *ranke*, *preſent*, and *give fire*; after the ſame manner *wheeling-off*, and taking their *places*, as aforeſaid: and ſo ſucceſſively, the reſt (both *files* and *ranks*) *give fire*, obſerving the ſame order. And having *given fire*, *once*, *twice*, or *oftner* over, they are ſtill *reduced* to the ſame they were before the *firing* began. Then *draw* your *Muſquettiers* from the *reere*, to the *left-flanke* again; and they will have their places as at firſt.

The reducement.

CHAP. XCI.

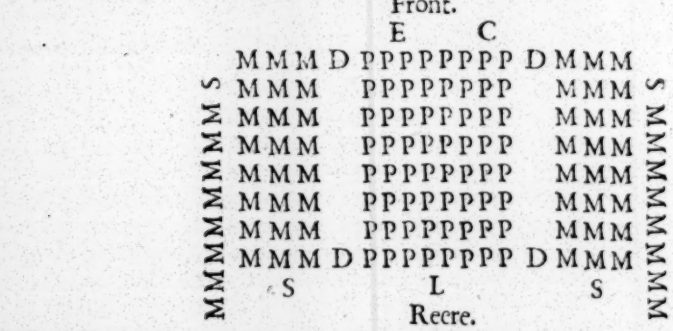
Of firing to both flanks, marching.

Firings, to *both flanks* and *marching*, without all peradventure are as requiſite to be *practiſed* in times of *exerciſe*, as neceſſary to be *uſed* in times of *danger*: when the *politicke* and *nimble enemy*, ſhall lie beating upon your *flanks*, therby ſeeking to *diſtreſſe* you in your *paſſage*, or *force* you to *Alt*, perhaps to your greater *diſadvantage*. For the *manner* or *way* to perform the *firing*; it muſt have reference to the *time*, *number*, *place*, and ſtrength of the *enemy*: with other like circumſtances conſiderable, by the *diſcreet* and *well-adviſed Captain*: and accordingly to *draw-off* his *Muſquettiers*, either for *ſecurity*, or *advantage*. Sometimes placing them between their own diviſions and the *Pikes* (as in this following *firing*) at other times, placing them * between the midſt of their *Pikes*, the better to ſecure them.

* *As in Ch. 87 which is a very good firing if the Souldiers be well exerciſed.*

Divers other ſuch like wayes there are to be uſed at the diſcretion of the *Commander*; and as the preſent occaſion ſhall require. *But becauſe I inſiſted ſomewhat largely upon the firings on the right-flanke, I ſhall not need to ſhew them again, by diviſion on both flanks*; but will conclude them all in this one. The words of *Command* which produce the *firing*, are as followeth.

Muſquettiers give fire to both flanks, and then place your ſelves between the Pikes and your owne diviſions.



The direction for this firing.

The *Command* being given, the *outermoſt file on each flanke preſents outward*, the reſt of the body ſtill continuing the *march*. The *preſented files* (in the interim) *giving fire*; then *facing* after their *proper file-leaders*, who are to lead them up betweene the *Muſquets* of their owne *Diviſions*, and the *Pikes*. In the time of their *wheeling-away*, the next *two files preſent*, *firing* after the ſame manner, and leading up as before. The reſt (ſucceſſively) doing the like, untill they have *fired all over*; which brings them to their former places. The *Firing* may be continued at diſcretion, each *firing* being its owne *Reducement*. Neverthe-

leſſe,

theleſſe, it may ſo fall out, that either through the *fury of the enemy*, advantage or diſadvantage of the ground (or ſome ſuch like accident) the Body may be forced to make *Alt*, and to *face* to both *Flanks*; and ſo with *Fronts accidentall*, to maintaine the *fight ſtanding*. To which end, the *Firing* in the ſucceeding *Chapter*, ſhall be of that ſort. Therefore *ſuppoſe the Body faced to the right and left*, preparing to *give fire*.

The Muſquettiers having given fire all over, they are reduced to their places, as at firſt.

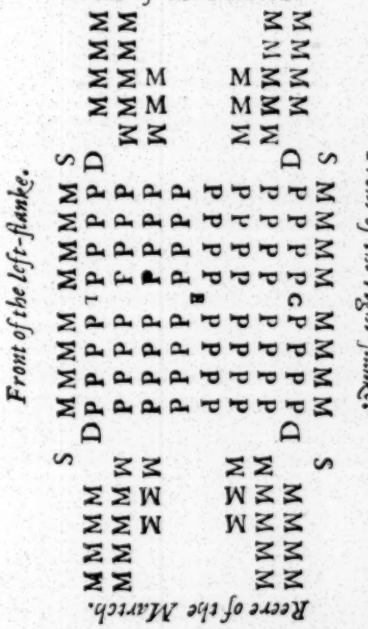
CHAP. XCII.

A Firing to both Flanks ſtanding.

Firing to *both flanks*, upon a ſtand, is a good and ſerviceable *Firing*. And although it ſhew but thin in the Figure; yet it may be uſefull for the *Field*, eſpecially if there be a *larger proportion* of *number*, then I have made uſe of in my *Formes* and Figures of *Battell*. The words of *Command* and *Direction*, which produce the Figure, are as followeth.

Advance your Pikes and ſtand, Face to the right and left, Muſquettiers give fire and flanke your Pikes.

Front of the Match.



Front of the left-flanke. *Front of the right-flanke.*

Reere of the Match.

The direction for this firing.

The Body being *faced* to the *right* and *left*, the *foremoſt ranks of Muſquettiers* (which were the *outermoſt Files*,) *preſent* and *give fire*, and then *wheel-off* by *diviſion*, *ranking even with the foremoſt ranks of Pikes*, and leaving ſufficient *Intervals for the* reſt of the *Muſquettiers*, to *march* between them and the *Pikes*. The next rank *preſenting* and *firing* after the ſame manner [a] but not advancing forwards: only *firing* upon the ſame ground, and *wheeling-off* by *diviſion*; afterwards paſſing downe *between* the *Intervals*, and ſo rank after their leaders. It is herewithall to be noted, that they that were out-moſt when they *gave fire*, are likewiſe to be ſo when they have taken their places. If theſe inſtructions be not ſufficient, turn back to the Figure of the [b] *Demi-hearſe*: where the manner of execution is all one with this. All the ranks of *Muſquettiers* having *fired* and *wheeled-off*, as before; the *Pikes* if need be may *charge*, and the *Muſquettiers give fire* over againe, *wheeling-off* outward, and placing themſelves in the *Reere of their own diviſions*. Having *advanced* your *Pikes*, and

** Upon ſome occaſions it will be neceſſary for the Muſquettiers and Pikemen to advance into the leaders ground, but then ſuch direction will be given.*

[b] The Demi-hearſe, in Chap. 76.

* *This facing brings all the Muſquettiers to the Front and Reere; if you would bring your Muſquets into their firſt place, let them give fire and wheel-off as before, which will reduce them againe to the Flanks.*

* *faced* your *Body* to the *firſt-front*, all your *Muſquettiers* will be in *Front* and *Reere*: and then, if you *face your halfe-files about*, and *give fire* after the ſame manner to the *Front* and *Reere*, having *faced* them again to their *firſt-front*, they will be *reduced*, as at firſt, into their ordinary *Square*. Nevertheleſſe, I will *reduce* it by another *Firing*, which was firſt invented and ſhewed us by that worthy *Citizen*, and excellent *Souldier*, Captain *Henry Waller*, now deceaſed: It is a *Firing* in *Front*, the *Muſquettiers* of the *Reere-diviſion* opening to the *right and left*, and *ſleeving-up on the Flanks of Pikes*, untill the Leaders of the *Reer-diviſion* (who as then are the *halfe-file-leaders*) *rank even* with the *Front of Pikes*. The words of *Direction*, that produce the *Figure*, follow in the next Chapter.

CHAP. XCIII.

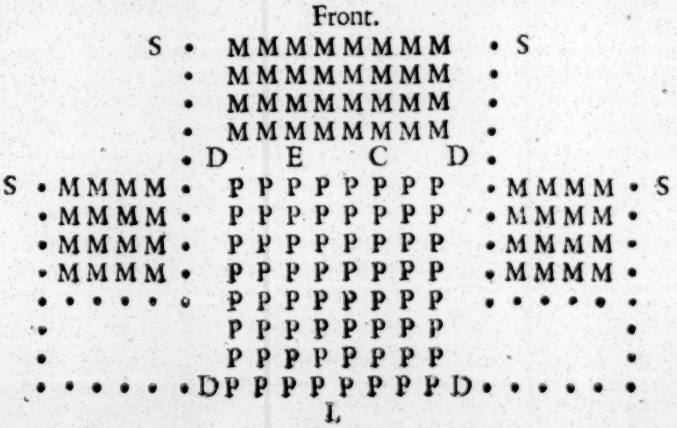
Captain Wallers *Triple Firing to the Front.*

THis *Triple Firing* to the *Front*, hath had the approbation of good and wel-experienced *Souldiers*, who have all acknowledged it to be both *ſolid* and *ſerviceable*; bringing many hands to fight in very good order, the *Pikes* being ſecurely covered by their *Muſquettiers* in *Front*; neither need they be idle in time of *Battell*, if they have any * *Bow-Pike-men* amongſt them, for that they may ſend their *Whiſtling Archery* over their *Muſquettiers* heads, without offence to their Friends, though not without dammage to their Enemies. If any carp at the depth of the *Muſquettiers* (either in this *Figure*, or in any other in this Book) I ſhall requeſt them to ſuſpend their cenſures, and wiſely to conceive by a little, what a great deal meaneth: my intent not being to make my Book *monſtrous*, by having little leaves, and large *Figures*. Onely I deſire with this ſmall number to ſhew the nature of ſeverall *forms* and *Figures* of *Battell*, the manner of their *Firings* and *Wheelings-off*, their orderly *placings*, and ſeverall wayes of *Reducement*; not having the leaſt conceit to induce any to beleeve, that men are able long to continue an orderly execution at 4. deep, although (ſometimes for *ſtratagems*) they may be reduced into a leſſer number. But leſt by digreſſion I too farre treſpaſſe upon your patience, I will returne to ſhew the manner of the *Firing*. Onely, firſt obſerve the words of *Command* and *Direction*, which produce the following *Figure*.

* *The Bow faſtened to the Pike may doe good ſervice, where the Souldier is skilfull, and the Enemy comes within their danger.*

Note that in the foregoing *Chap.* the Muſquettiers were left in the Front and Reer: The direction over the Figure, Commanding the Reer-Squadron of Muſquettiers to martch up and range even with the Front of Pikes, which perfects this Figure. Some have miſtaken, ſuppoſing I had formed this Figure with them words: conceiving all the Muſquettiers, before that Command, on the Flanks.

Muſquettiers of the Reere, double your Front of Pikes by diviſion.



The

The Command being given, the *firſt-rank* of *Muſquettiers* (both of *Front* and *Flanks*) *preſent* to the *Front*, and *give fire*, *wheeling-off* to the *right* and *left* by *diviſion:* The *Muſquettiers* of the *Front-diviſion* being *wheeled-off* (as afore-ſaid) *cloſe by the Flanks of their own Muſquettiers*, paſſe directly down *between the Intervals*, and place themſelves *even in Rank behind the Muſquettiers of the Reer-diviſion, which are upon the Flanks.* This you may perceive by the *pricks* that come down between the *Intervals.* The *Muſquettiers* alſo that *fired* the ſame time on the *Flanks*, *wheel-off* in like manner, (the *right-flank* to the *right*, the *left-flank* to the *left*) *martching* directly down, even with the *Reer-rank* of *Pikes*; and there place themſelves again, even in *rank* with the *laſt-rank* of *Pikes.* This done, the reſt of the *Ranks* (ſucceſſively) *give fire*, and doe the like; every *Ranke* taking his place after the *Rank* which *fired* laſt before them; the other *Rank* moving one *Rank* forwarder. The *Muſquettiers* having *given fire* once over, and *falling-off* according to this direction, they will be *reduced* to the *Flanks* again, as they were at firſt, in the former Chapter. The *Firing* may be continued, or the *Pikes* may *charge*, at the diſcretion of the *Commander.*

The direction for this firing.

The Muſquettiers having fired once over, they are reduced again to the flanks.

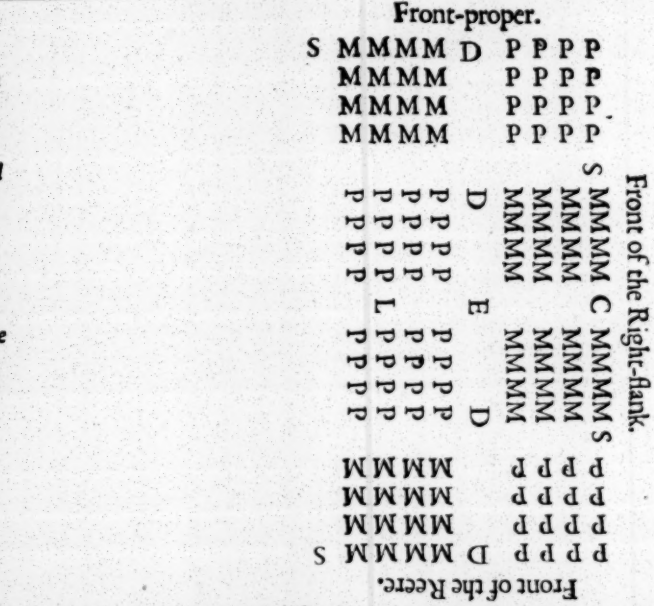
CHAP. XCIV

The Demic-Plinthium; being a Tripartite Firing, doing execution to the Front, Reere, and Right-Flank.

FIgures and *forms* of *Battell* may be infinite; according to the judgements of the *Commanders*, and the various workings of the divers *motions:* no *art* nor *ſcience* yeelding more content unto the ſtudious *Practitioners*; none more *honourable* and *beneficiall* for the good of our *Countrey*; none more *neglected*, and leſſe *countenanced*, than the *Practiſers* of the *Art Military:* nor none more *ſcruced-up*, in the places of their abiding, than thoſe men this way affected. Our rich *gown-men* holding it as a Maxime, *That Souldiers (though Fortune hath been but ſparing in their portions) yet they muſt be taxed in the Pariſh-Books like grounded Gentlemen.* Thus much incouragement wee have for ſpending our money and time for our Countries good; and this (in good time) I hope will be amended. The next *Firing*, being a *Firing Tripartite*, doth *execution* to the *Front*, *Reer*, and *Right-flank*, at one and the ſame time. For the *uſe*, I ſhall referre it to the *judgement* of the *judicious:* For the inſtruction, how it is to be *made*, the words of *Command* and *Direction* ſhew it; which are as followeth,

The common ſpeech being (oh let him pay) he hath money enough to ſpend upon his exerciſes of Souldiery.

Halfe-ranks of the left, double your Right-flank by diviſion.



If this figure were doubled, having ſo many more ordered in the ſame manner on the left-flank, it would be a compleat form to fire to Front, Reere, and Flanks.

The direction how to make this Figure is in the 27. Chap.

For the *Direction*, look back to the Chapter which treats of this *Doubling:* Onely, remember to *face* the *Diviſions* that way which you intend they ſhall *give fire.*

For the manner of the *Firing*, it is ordinary: the *fore-moſt rank* of *Muſquettiers* (on each part) having *fired*, they *wheel-off* to the *right*, or to the *right* and *left*, (according as directions ſhall be given) *placing themſelves* in the *Reere* of their *own diviſions:* the *next ranks*, in the mean time, *moving forwards* into their *leaders ground*; there in like manner *firing*, *wheeling-off*, and placing themſelves as before: the reſt of the *ranks*, ſucceſſively, doing the like. This *Firing* may be continued at pleaſure of the *Commander.* The *Pike-men* (as advantage may be given) in the *interim*, either *porting*, *charging*, or ſending their fatall *ſhowres* amongſt the thickeſt of their *Enemies.* Laſtly, for *Reducement*, *face* them all to their *Front-proper*, then command, *halfe-ranks that doubled, to face to the left, and ſo to martch into their places.* For further *directions*, turn back to *Chap.* 27. which ſhewes the *Reducement* of the afore-going *Figure.*

The reducement.

CHAP. XCV.

Of the Sconce-Battell.

For if it were made with a Regiment, Brigade, or larger Body, it would require other words of direction, but be nothing more difficult.

THe *Sconce-Battell* is a *Figure* moſt properly fit for a whole *Regiment*; at leaſt, for a larger proportion of *number* then is here expreſt; it neither being *good* nor *ſafe* to divide a ſmall *Company* into ſo many *ſub-diviſions* and *Maniples:* yet, to give ſatisfaction unto ſome, I have placed it here amongſt my *Figures*, and ſhewn the way how to make it with a *private Company.* For the manner or way how to *fire* upon it, may be divers: the *Muſquettiers* being ſo placed, that they may *give fire* to the *Front* and *Reere*, to the *Right* and *Left*, to all *foure* together, at the diſcretion of the *Commander.* If your *Muſquettiers give fire* to the *Front* and *Reere*, (every *Rank* making good his *leaders ground*) then the *Figure* will ſtill continue the ſame. If they *give fire* without *advancing* into their *leaders ground*, then the *Muſquettiers* will *rank-even* again with their *Pikes*; and the *Figure* will become an *hollow Croſſe*, the *Muſquettiers* making the *Angles.* The words of *Command* and *Direction*, which produce the *Figure*, are as followeth.

Halfe-

Halfe-files of Muſquettiers, face to the Reere.

That being done, *Command all the Muſquettiers to martch to the Angles of their Pikes.*

Next cauſe, *The two firſt and two laſt Ranks of Pikes to ſtand.*

The reſt to face to the right and left, and martch untill they are cleer of the other Pikes, then ſtand.

Laſtly, command, *The two firſt and laſt ranks of Pikes, which did not move, to double their Files to the right.*

Theſe words of *Command* and *direction* being *executed*, perfect the *Figure*, as followeth.

The Sconce Battell.

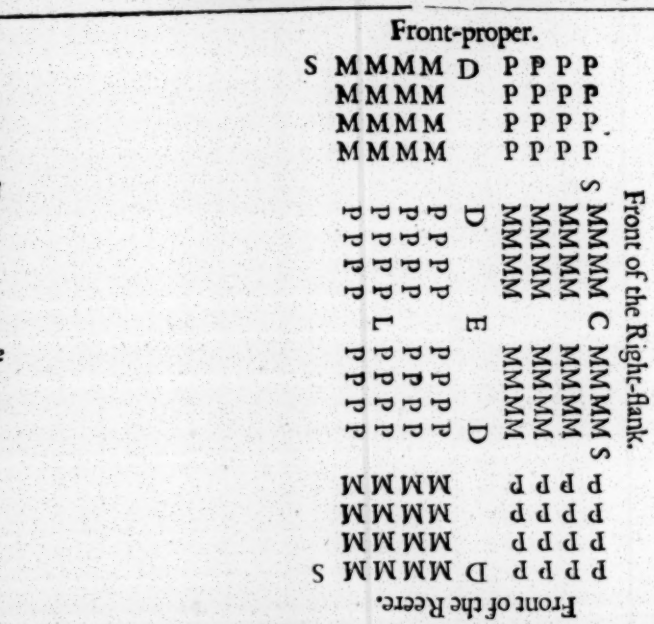
Many and ſeverall are the *Firings*, which (with ſome little *alteration*) may be drawne from this Figure. Nevertheleſſe not to ſpin out time with diſcourſe, the *Firing* now *intended* to be *ſhewn*, is to be performed to the *front* and *reere*. To which purpoſe, the one *halfe* (both of *Muſquettiers* and *Pikes* are to *face-about to the right*; there *preſenting* and *giving fire*: thoſe of the *right-flanke wheeling-off* to the *right*; the *left-flanke* to the *left*, and *placing* themſelves in the *Reere* of their owne *diviſions*. The next *ranke* ſtill *moving forwards* into their *leaders ground*; the other *ranks*, ſucceſſively doing the like. After this manner, the *firing* may be continued, and the *Figure* ſtill preſerved. *By ſubdividing and new placing ſome of the diviſions.*

For *reducement*. Firſt, *face* them all after their proper *file-leaders*. Secondly, cauſe the *front* and *reer-diviſions* of *Pikes* to *double* their *ranks* to the *left*. Thirdly, *command* the *Pikes* of the *flanks* to *face* in *oppoſition*, *cloſe* their *diviſions*, and then to *face* after their *leaders*. Next, *command* the *Muſquettiers* of the *front-diviſion* to *face* to the *reere*. Laſtly, *command* the *Muſquettiers* (both of *front* and *reere*) to *cloſe* their *diviſions*. And then being *faced* to their *leader*, they are perfectly *reduced*, as at firſt. *The Reducement.*

CHAP. XCVI.

Of Firing by three Files at once; two of them ſtanding oblique, the other direct.

WHen I began to treat of *Formes* and *Figures of Battell*, I noted all *firings* to be either *oblique* or *direct*; and now [illegible] to the curious, I ſhall inſert two or three



If this figure were doubled, having ſo many more ordered in the ſame manner on the left-flank, it would be a compleat form to fire to Front, Reere, and Flanks.

The direction how to make this Figure is in the 27. Chap.

For the *Direction*, look back to the Chapter which treats of this *Doubling:* Onely, remember to *face* the *Diviſions* that way which you intend they ſhall *give fire.*

For the manner of the *Firing*, it is ordinary: the *fore-moſt rank* of *Muſquettiers* (on each part) having *fired*, they *wheel-off* to the *right*, or to the *right* and *left*, (according as directions ſhall be given) *placing themſelves* in the *Reere* of their *own diviſions:* the *next ranks*, in the mean time, *moving forwards* into their *leaders ground*; there in like manner *firing*, *wheeling-off*, and placing themſelves as before: the reſt of the *ranks*, ſucceſſively, doing the like. This *Firing* may be continued at pleaſure of the *Commander*. The *Pike-men* (as advantage may be given) in the *interim*, either *porting*, *charging*, or ſending their fatall *ſhowres* amongſt the thickeſt of their *Enemies*. Laſtly, for *Reducement*, *face* them all to their *Front-proper*, then command, *halfe-ranks that doubled, to face to the left, and ſo to martch into their places.* For further *directions*, turn back to *Chap.* 27. which ſhewes the *Reducement* of the afore-going *Figure.*

The reducement.

CHAP. XCV.

Of the Sconce-Battell.

THe *Sconce-Battell* is a *Figure* moſt properly fit for a whole *Regiment*; at leaſt, for a larger proportion of *number* then is here expreſt; it neither being *good* nor *ſafe* to divide a ſmall *Company* into ſo many *ſub-diviſions* and *Maniples:* yet, to give ſatisfaction unto ſome, I have placed it here amongſt my *Figures*, and ſhewn the way how to make it with a *private Company*. For the manner or way how to *fire* upon it, may be divers the *Muſquettiers* being ſo placed, that they may *give fire* to the *Front* and *Reere*, to the *Right* and *Left*, to all *foure* together, at the diſcretion of the *Commander*. If your *Muſquettiers give fire* to the *Front* and *Reere*, (every *Rank* making good his *leaders ground*) then the *Figure* will ſtill continue the ſame. If they *give fire* without *advancing* into their *leaders ground*, then the *Muſquettiers* will *rank-even* again with their *Pikes*; and the *Figure* will become an *hollow Croſſe*, the *Muſquettiers* making the *Angles*. The words of *Command* and *Direction*, which produce the *Figure*, are as followeth.

For if it were made with a Regiment, Brigade, or larger Body, it would require other words of direction, but be nothing more difficult.

Halfe-

Halfe-files of Muſquettiers, face to the Reere.

That being done, *Command all the Muſquettiers to martch to the Angles of their Pikes.*

Next cauſe, *The two firſt and two laſt Ranks of Pikes to ſtand.*

The reſt to face to the right and left, and martch untill they are cleer of the other Pikes, then ſtand.

Laſtly, command, *The two firſt and laſt ranks of Pikes, which did not move, to double their Files to the right.*

Theſe words of *Command* and *direction* being *executed*, perfect the *Figure*, as followeth.

The Sconce Battell.

Many and ſeverall are the *Firings*, which (with ſome little *alteration*) may be drawne from this Figure. Nevertheleſſe not to ſpin out time with diſcourſe, the *Firing* now *intended* to be *ſhewn*, is to be performed to the *front* and *reere*. To which purpoſe, the one *halfe* (both of *Muſquettiers* and *Pikes* are to *face-about to the right*; there *preſenting* and *giving fire*: thoſe of the *right-flanke wheeling-off* to the *right*; the *left-flanke* to the *left*, and *placing* themſelves in the *Reere* of their owne *diviſions*. The next *ranke* ſtill *moving forwards* into their *leaders ground*; the other *ranks*, ſucceſſively doing the like. After this manner, the *firing* may be continued, and the *Figure* ſtill preſerved. *By ſubdividing and new placing ſome of the diviſions.*

For *reducement*. Firſt, *face* them all after their proper *file-leaders*. Secondly, cauſe the *front* and *reer-diviſions* of *Pikes* to *double* their *ranks* to the *left*. Thirdly, *command* the *Pikes* of the *flanks* to *face* in *oppoſition*, *cloſe* their *diviſions*, and then to *face* after their *leaders*. Next, *command* the *Muſquettiers* of the *front-diviſion* to *face* to the *reere*. Laſtly, *command* the *Muſquettiers* (both of *front* and *reere*) to *cloſe* their *diviſions*. And then being *faced* to their *leader*, they are perfectly *reduced*, as at firſt. *The Reducement.*

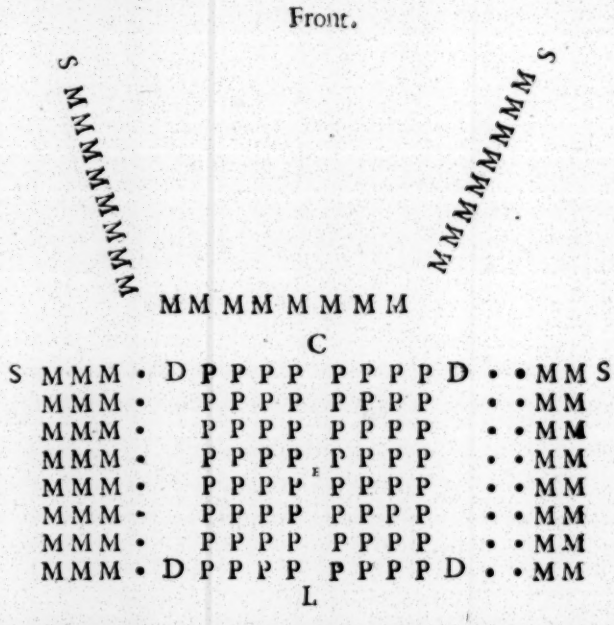
CHAP. XCVI.

Of Firing by three Files at once; two of them ſtanding oblique, the other direct.

WHen I began to treat of *Forms* and *Figures of Battell*, I noted all *firings* to be either *oblique* or *direct*; and now for ſatisfaction to the curious, I ſhall inſert two or three

The first making or direction to the figure.

three *oblique formes* amongst the rest. The first whereof shall be a *Firing to the Front, by drawing forth the outer-most file on each flank obliquely*, (or the *inner-most*, as shall seeme best to the *Commander*) untill the *bringers-up* of the *Files, stand even* with the *right* and *left-angle-men*, over the *front* of *Pikes*. They may also lead a *file* of *Musquettiers* crosse the *front* of *Pikes*; when having *placed* and *faced* them (as they ought) for *execution*, they will *stand* in manner of this following *Figure*.



The way to give fire obliquely demonstrated.

The *two files* of *Musquettiers* which were *led forth*, having *obliquely presented inwards*, and the *file drawn crosse* the *front* of *Pikes*, being *presented* direct *Rank-wise*: upon the first *command*, they are all to *give fire together*, and then to *face* after their *bringers-up*, who lead their *files* directly into their *places*. This done they *face* to their *proper-front* againe; the other *files* (in the meane time) leading forth after the same manner. These having done their *execution*, are to returne into their *places*: being *led-off* by their *bringers-up*, (as is aforesaid.) The rest of the *files*, after the same manner, *firing*, and *returning* untill they have all *given fire*; and then they will be all *reduced*, as at first.

CHAP. XCVII.

A Firing oblique, by four files together, in form of a W.

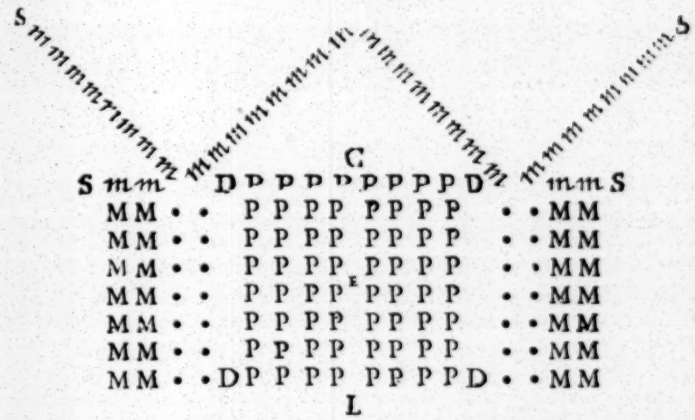
The direction to make this figure.

ALl the commendations that may be given of these *oblique Figures*, is, that they *poure out a great deal of shot at once, and may quickly be reduced to their places*. Notwithstanding they are a great weakning to the *Body*, if any sudden accident should happen before they are setled in their former *stations*. Nevertheless, I shall leave them to themselves and if they be found to hold out weight, I shall not grudge that I have given them roome amongst the rest. But if they prove too light, let them be as lightly respected, yet bear somewhat with them for their *antiquity*. The way to make the *figure*, is as followeth. The two *innermost files* of *Musquettiers* on each *flanke*, *march* forth (each of them being *led* by an *Officer*) untill they have taken their *places*. Then the *Officers* that *led* forth the *two middle-*

most

moſt files, are to returne to their *places* again; the *Serjeants* that led-forth the *outer-moſt files*, ſtanding to ſee them doe their *execution*. Yet before the *Muſquettiers* have order to *give fire*, obſerve the manner of their *ſtanding*, by the following *Figure*.

The W *oblique.*



The *Muſquettiers* having *preſented*, according to their directions, they *give fire* all together; and then ſuddenly *facing* after their *Bringer's-up*, *martch* down into their places: the *next two files* of each *Flanke*, in the *interim* of their *martching-away*, are to *move forwards* to their *ground*; where they are in like manner to *give fire*, and then to take their places, as afore-ſaid. The reſt of the *files* of *Muſquettiers* (if you have more) muſt then *move forwards*, and doe the like. And in this ſort may the *Muſquettiers give fire*, *once*, *twice*, or *oftner* over; each *Firing* being a *Reducement* to it ſelfe. *The direction to give fire from this Figure.*

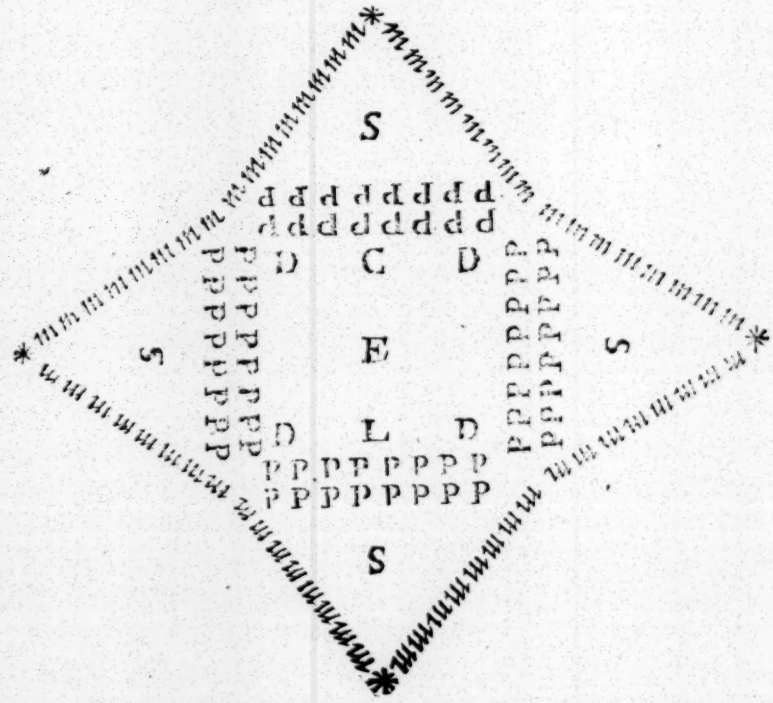
CHAP. XCVIII.

Of the Fort-Battell; the way to make, and to reduce it.

THe *Figure* of the *Fort-Battell* is an *oblique Firing*, and taketh its *denomination* rather from the *ſimilitude*, then the *ſtrength* of a *Fort*. Its chiefe uſe is, for the *entertainment* of ſome great *Perſonage* or *Commander*, in the *Field*: who being received into the *midſt* of the *diviſion* of *Pikes*, the *Muſquettiers* may *preſent*, and *give fire* altogether, in one *volley*. Or if they would have the *Muſquettiers give fire* one after another, then the *volleys* by *ſucceſſion* (which ſome call the *Peal*) will be the beſt. If there be more *Muſquettiers* then will ſerve to make up the *Figure* ſingle, they may alſo *give fire* with the reſt, *preſenting obliquely*, between the *diſtance* of their *leaders*. The way to make this *Figure* is as followeth: Firſt, *draw forth the out-moſt files* (of *Muſquettiers*) on each *Flanke*, in *form* of an *hollow wedge*, before the *Front* of *Pikes*: then cauſe the *next two out-moſt files* to *face-about*, and to follow their *Bringers-up*, in the ſame *forme*, to the *Rèere*: Then let the *laſt two files* of *Muſquettiers* (on each *Flanke*) be *drawn* after their *File-leaders*, in the ſame *manner* and *form*, to the *Flanks*. The *Muſquettiers* being thus *ordered*, and all *preſented obliquely outwards*, command the *two firſt* and *two laſt ranks* of *Pikes* to *ſtand*; the reſt of the *Pikes*, to *face* to the *right* and *left*, and ſo to *martch* untill they are *cleare* of the other *Pikes* which *ſtand*: then command the *Pikes* which *moved*, to *double their files to the right*: Laſtly, command all the *Pike-men* to *face-outward*; each *The uſe of the Fort-Battell.* *The direction to make this Figure.*

diviſion of *Pikes*, after their *hollow wedge* of *Muſquettiers*: Or elſe, let them *face* all *inward* to the *Center*; and then the *Body* will ſtand in *form* of the following *Figure*.

The Fort-Battell.



Theſe firings are to be performed ſtanding, the Muſquettiers having given fire, are to make ready again in their places maintaining their figure. Reducement

Having *fired* upon this *Figure*, there is no manner of *wheeling-off*; becauſe the *form* is ſtill to be continued. But when you come to *Reducement*, firſt *face* all the *Pikes* to their *proper Front*; that is, unto the *place* where you find the *proper File-leaders*. Secondly, let the *Pikes* which are *Flankers*, *double* their *ranks* to the *left*, and ſo *cloſe* their *diviſions*; then the *Pikes* will be *reduced*. For the *Muſquettiers*, firſt command thoſe that are on the *Flanke*, to *lead-up* their *files* in their *due places*, cloſe to the *Pikes*: Next, command the *Muſquettiers* of the *Reere* to *ſleeve-up* on each *Flank* by *diviſion*: Laſtly, command the *Muſquettiers* before the *Front* of *Pikes*, to *face* after their *Bringers-up*, and to *march* down into their *places*: Laſtly, *facing* to their *Leader*, they are all *reduced* as at *firſt*.

CHAP. XCIX.

Of the Croſſe-Battell: how to make it with a private Company: the wayes to fire upon it: with other diſcourſes, concerning the neceſſities inforcing that Figure; with the means to make it more defenſive and ſerviceable: and laſtly, the way to reduce it.

THe *Croſſe-Battell*, although it muſt needs ſhew *poor* and *thin*, being here *demonſtrated* by a *number* not *ſufficient* to expreſſe the *worth* of the *Figure*; yet hath it not the *approbation* both of *ancient* and *modern Commanders*: who (with good *ſucceſſe*) have of-

drawn out, the *grosse* of their *Battels* into this *form*; and therewith both *sustained*, and *recharged* upon their *enemies*. Each *division* being very *aptly placed* to relieve the other. If the *enemy* be like to *give on in front*, then the *Reer-division* may *sub-divide*, and *march up by each flanke* making the *wings*. But if that part be supplyed by the *Cavalry*, then they may serve to *line*, or *mixe*, *between the Intervals*, and *divisions* of the *horse*; or be *otherwise disposed of*, at the discretion of the *Commander*. Nevertheless, if any object, that the *enemy* being in open *Campania*, may as well *charge* your *Battells* in *flank* or *Reere* as in *front*. The answer may be easily given; that the *Body* being *faced*, the matter doth still continue the same.

If it be re-objected, that the *enemy* having the *advantage* in *number*, may seek to *distresse* you; by *charging on the severall places at once*. To that may likewise be answered, that each *division* may *readily face* to that part and *receive their charge*.

Notwithstanding, discreet *Commanders* have ever been *cautious*, to *adventure* into the [a] *even*, and [a] *open countries*, (when the *enemy* hath the *advantage* of *horse*; or much the *greater number* of *foot*) whereby they may be forced to the [b] *hazard* of a *Battell*: The which without *manifest necessities*, or (to the contrary) some *knowne* and *extraordinary* advantages, ought neither to be given, or *accepted*: So *nice* and *tickliſh* is the *chance* of *warre*; where small errours, oftentimes, are the *fore-runners* of great *overthrowes*. But my intent is not to lanch forth into these lavish discourses, but timely to make my retreit unto my *private Company*, and without further circumstances, of what hath, or may be done; come to shew what I intend concerning this *figure*: and shew the wayes to *fire upon it*; the which are ordinarily two, &c.

[a] *Even and open Countries very dangerous for small bodies: where the enemy is superiour in number, or horse.*

[b] *The hazard of a Battell perillous.*

The [c] first, when the *Musquettiers give fire*, and then place themselvs in the *reer* of their *owne divisions* of *Musquets*. The [d] second way is, after that they have *fired*, to place them in the *reere* of their *Pikes*, the *Pikes* maintaining the *Musquettiers* ground. The words of *Command* which produce the *Figure*, are as followeth.

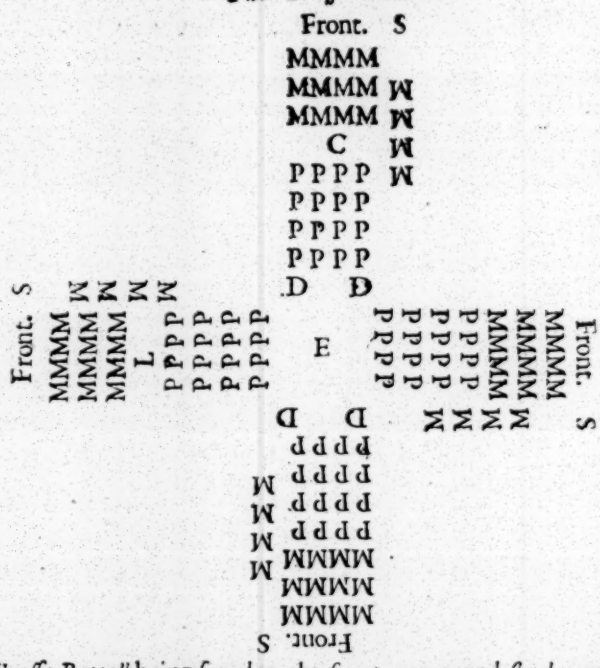
[c] *The first placing of the Musquets.*

[d] *The second way of placing the Musquets.*

Two first Rankes, wheel your Front into the midst.
Two last Ranks, wheel your Reere into the midst.
The rest of the Body, face to the right and left, and so march, untill the Reer of the four divisions make an even hollow square.
Then let the Commander go into the midst, (or center) and face the whole Company to him: giving them such direction as is meet.
Lastly, being all faced about to the right, the body will stand like the following Figure.

The direction to make the Crosse-Battell with a private Company: also you may observe if that the Crosse Battell were to be made with a Brigade, or Regiment, then in stead of wheeling two Ranks, we should perhaps wheel two or 3. Companies to either part, &c.

The Crosse Battell.



Note that as men ſtand in rank when they give fire, ſo they are to place themſelves again, when they have fired. The outer-moſt man taking the out-ſide places: the reſt in like manner, orderly placing themſelves within them.

[a] This *Croſſe Battell* being *faced* to the *front*, *reere*, and *flanks*, and the *Musquettiers commanded* to *give fire*: one *way* of *placing* them is, in the *reere* of their *owne diviſions* of *Musquettiers*; for that hereby, the *Muſquettiers* will ſtill continue their *places*. For the ſecond *way*, after that the *firſt ranks* have *given fire*, let them *wheel-off* to the *right*, (or to the *right* and *left*, if the number be *large*) and [b] *place* themſelves in the *reere* of their *Pikes*, each *ranke moving forwards*, and *maintaining* their *leaders ground*. The ſecond *rank* in like manner is to *fire*, and to take their *places* after the *Muſquettiers* which *fired*, and *wheeled-off* laſt before them. The reſt ſucceſſively, are to doe the like, untill all the *ſhot have fired*, and are *wheeled-away*: Then let the *Pikes charge*, &c. If any object, that it is *dangerous to have ſo large diſtance between the front of each firing*: I have already declared, that it muſt needs be occaſioned by ſome great extremity, thrown upon us through *negligence*, or *neceſſity*, when we ſhall be forced to accept the *Battell*, with ſo evident ſignes of *diſadvantage* where the *enemy* may ſurround and *charge* upon us in *front*, *reere*, and *flanks*. And therefore ſeeing that in ſuch caſes we are not alwayes afforded *meanes*, nor *time*, to *ſupply* all defects: we muſt be content, according to the ſuddenneſſe of the occaſion to make ſo good *defence*, as for the preſent we may conveniently *provide*. And in ſuch places which lie moſt *open* to the *enemy* (where through defect of *number*, [c] the danger muſt needs be *great*) there to place the *Wagons*, *Carts*, and other *Carriages* ſo *commodiouſly*, that they may ſerve for a *Rampart*, or defence againſt either *Horſe* or *foot*. Or if it may be found more *convenient*, to *impale* thoſe places (leaſt *defenſible*) with ſharp [d] *Palliſadoes*; (the which hath beene a *weapon of ancient uſe, and now againe lately practiſed, by the Gentlemen of*

[a] *The direction to this firing.*
[b] *When there is not above two or three ranks of Muſquettiers to give fire, the Pikes may port, when all the Muſquettiers are in the Reere of the Pikes, let them charge*
[c] *It is very dangerous to fight, when our Souldiers are diſheartned by ſome knowne and evident diſadvantage.*
[d] *Palliſadoes uſed by the Perſian army of Xerxes againſt the Grecians, at the Battell of Michale in Aſia, about 1800 yeers ſince, in moderne ſervice by the King of Swede againſt the Pole; as alſo in the Germane warre.*

the

the Military Yard;) and I conceive may prove very *uſefull*, to defend the *voyd* and *open ſpaces*, which want other defence, from the *fury* and *inſolence* of the *haughty* and *over-daring Horſe*. But if all theſe *helps* be *wanting*, then three or foure *files* of each *arms* may be *drawn croſſe*, from the *angle* of one *Front* to the *other*; the which being wel-ordered, may make reaſonable good *defence* on thoſe *parts*.

Having *given fire* upon the *Croſſe-battell*, and brought your *Muſquets* to the *Reere* of the *Pikes*, if you would *reduce* them, *paſſe* into the *midſt* or *center* of the *Figure*, and *face* all (both *Muſquettiers* and *Pike-men*) to you; and cauſe thoſe *diviſions* which were the *flankers*, to *cloſe to their order*: Next, *wheele* the *Fronts* into the *midſt* of the two other *diviſions*, one after the other; then goe to the *firſt-front*, and *face* the whole *Body* to you, and ſo you ſhall have all your *Muſquettiers* in the *midſt*, *flanked* with *Pikes*. If you would *reduce* them into their right places, command the *Muſquettiers* to *face* to the *right* and *left-outward*, the *Pikes* to *face* to the *right* and *left-inward*; and ſo to *paſſe thorow*, and *inter-change ground*. This being rightly performed, and the *Body re-faced* to their *firſt-front*, they are *reduced* to their proper *order*. *The Reducement.*

CHAP. C.

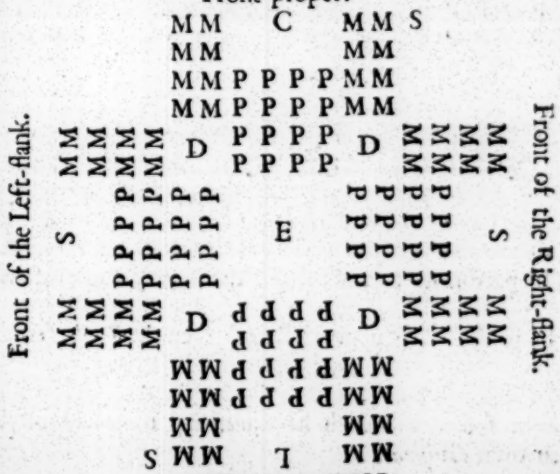
Of the hollow-fronted Croſſe-Battell: how to make it with a private Company; and the way to fire upon it, &c.

THis next *Figure* ſhall be of the *hollow-fronted Croſſe*, which is a *ſtronger form* than that laſt ſhewn; and yet thus much let me warn you of, that there can be but little expectation of *ſtrength* to be perceived, in *Battells* formed with ſo ſmall a *number*. This notwithſtanding, the * ingenious *Martialliſts* can eaſily diſcern thoſe things, which in warre may prove moſt uſefull for their own, and their Countries benefit; although they are here expreſſed to the publike view in ſo *meane array*, and in ſuch *thin numbers*. Wherefore, ſetting aſide all Apologies and Excuſes, I will briefly ſhew the words of *Command* and *Direction*, which will produce the following *Figure*.

* *Such, and ſo great lovers of arms as* Philopœmen *the* Achaian. Rawleigh *hiſt. mun. c.* 5 *of the* 5 *book* 1. *part.*

Two firſt-ranks, wheele your Front into the midſt.
Two laſt-ranks, wheele your Reere into the midſt.
The reſt face to the right and left, and martch untill they have made the perfect Croſſe.
Laſtly, cauſe the Muſquettiers to flank their Pikes, according to this following Figure.

The hollow-fronted Croſſe. *The directions to make the hollow-fronted Croſſe, the files containing* 8. *men in depth.*



The

The direction for this firing.

The ſeverall *directions* for *Firing* upon this *Figure*, may be divers; but to avoid *diſtraction*, I will ſhew onely one way, and that *directed* to the *Front*, *Reere*, and *Flanks*. Nevertheleſſe (for varieties ſake) you may cauſe them to *give fire* once over, *wheeling-off* by *diviſion*, and placing themſelves in the *Reere* of their own *diviſions*; ſtill *moving forwards* into their *leaders ground*, thereby to preſerve the *Figure* in the ſame *order*.

At the ſecond time of *Firing*, cauſe the *Pikes* to move *ſoftly up*, *even* with the *Front* of *Muſquettiers*, *porting* as they *advance forwards*. The *Muſquettiers* having *fired* and *wheeled-off*, are to *place* themſelves in the *Reere* of their *diviſions* of *Pikes*, (whom before they *flanked*) every *Rank* of *Muſquettiers firing*, *wheeling-off*, and *placing* themſelves as afore-ſaid. Laſtly, the *Pikes* having *charged*, and again *re-advanced*, the *Body* will ſtand in the *figure* of a perfect *Croſſe*.

The reducement is the ſame with the Croſſe-Battell.

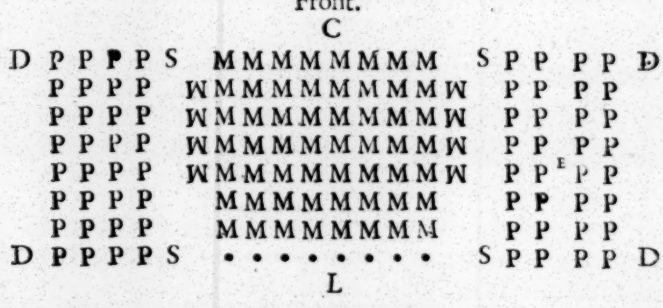
For the *Reducement*, it is the ſame with the *Croſſe-Battell*, delivered in the laſt Chapter: wherefore I ſhall need to adde no further *directions* in this place for the ſaid *Reducement*, then that the *Flank-diviſions* are to be *cloſed*, and the *Front* and *Reere-diviſions* to be *wheeled*, that the *Body* may be again returned into a *Square*, with the *Muſquettiers* in the *middle*. All this being here taught, I now proceed to ſhew one *Firing* with the *Muſquettiers* in the *midſt*.

CHAP. CI.

Of firing upon the Square-Battell, flanked with Pikes.

THe *Square-Battell flanked with Pikes* muſt needs be very ſafe for the *Muſquettiers*, as being a very able *defence* for the *Flanks*, againſt the incurſions of the *Enemies Horſe*. The *Figure* followeth, demonſtrating the *Muſquettiers* in *motion*.

The Square-Battell flanked with Pikes.



The ſeverall wayes of firing from this ſquare figure.

The wayes of *Firing* upon this *Figure* are ordinarily *three*: The *firſt Firing* is, with the *aſpect* being directed to the *Front*; the *Muſquettiers wheeling* either all *off* to the *right*, or to the *right* and *left*, as you perceive by this *Figure*. The *ſecond* is, for the *Muſquettiers* to *give fire* to the *Reere*, upon a *Martch*; which they may eaſily doe, from this *Figure*. The *third* is, to *give fire* to the *Front* and *Reere*, upon a *ſtand*; the *halfe-files* being *faced-about*. A *fourth Firing* may be, *to the Flanks by Extraduction*, if need be.

Note the firing to the front.

If the *Firing* be performed to the *Front*, then every *Rank* is to *martch-up* into their *leaders ground*.

The firing to the reere.

If the *Firing* be to the *Reere*, upon a *Martch*, then the *Ranks* (contrariwiſe) *cloſe backwards* towards the *Reere*, to make good the *Battell* on that part.

The firing to the front and reere.

If it be to the *Front* and *Reere*, upon a *ſtand*, then the *Muſquettiers martch-up* into their *leaders ground*, and thoſe which have *fired* and are *wheeled-off*, place themſelves in the *Reere* of their own *diviſions*.

To write further of this *Firing*, were more than neceſſary; no one of theſe *Firings* any wayes altering the *Figure*, but the *aſpect* onely. Nevertheleſſe, if the *Commander* pleaſe, hee may, after the *Firing* in *Front*, *wheel both Flanks into the Front*, and ſo *charge Pikes*; and from thence proceed to other *Firings*.

If the *Firing* were in the *Reere*, hee may *wheel the Flanks into the Reere*, and cauſe his *Pikes* to *charge* that way.

If the *Firing* were to the *Front* and *Reere*, hee may *wheel both Flanks into the Front and Reere*; and ſo *charge* with his *Pikes* both wayes: which by Captaine *Bingham* is called *Amphiſtomus*.

Theſe two wheelings are to be underſtood for ſingle Companies, and not for large bodies.

If the *Firing* were to one or both *Flanks* by *Extraduction*, then the *Pikes port* all the time the *Muſquettiers are giving fire*, and after *charge*, at diſcretion of the *Commander*. You may further obſerve, that if the *Horſe charge home*, then the *Pike-men* muſt *charge*, and the *Muſquettiers couch* very low, while they *move croſſe the Front*, and *give fire* on their knees. Before I come to *Reducement*, I ſhall proceed to the next *Firing* in the enſuing *Chapter*.

CHAP. CII.

Of the ancient manner of the imbattailing the Plinthyum: the placing of each Armes, and the uſe of the Figure.

THe *Plinthyum*, *anciently uſed amongſt the* Grecians, *was an even, four-ſided (or four-fronted) Battell; the middle-part thereof being commonly hollow: on the out-ſides alwayes martched the heavie armed; the light and nimble armed Slingers, Darters, and Archers, being more ſecurely placed in the midſt.* Eudamus.

Notwithſtanding, it took denomination from the *form*, and not from the *placing* of the *Armes*: (For example) *Eumenes* having ſent for his *Elephants* to their *wintering ſtations*, *Antigonus* thought to take them by *ſurpriſe*; and to that purpoſe ſent 2300. *Speare-men* and *Tarentines*, with all his *light-armed foot*; who over-taking them upon the way, &c. The *Commanders* of the *Elephants* ordered the *Beaſts* into the *Plinthyum*, caſting all their *Carriage* into the *midſt*. And indeed, it was a *Figure* commonly taken up in times of neceſſity, when the *adverſe part* was much the abler in *horſe*. And to that purpoſe was it framed by *Timotheus* the *Athenian*, *Briſidas* the *Lacedemonian*, *Bardillis* the *Illirian*, *and many others*; being uſefull and neceſſary, as well in time of *Battell* as in *Martch*; at both times for the ſecurity of the *Carriage*, and the defence of the *ſick* and *wounded*. Much like unto this, is our *hollow four-fronted Battell*; which may well retaine the ſame name, although ſometimes differing in the placing of our *Armes*. For if it ſhould ſo happen (as it often doth) that a *Charge* be given in *Front*, *Reere*, and *Flanks*, at one and the ſame time, then I conceive this enſuing *Figure* very apt for defence, for that the *Muſquettiers* and *Pikes* are ſo placed, that each *Arms* may be aiding and aſſiſting to the other. For ſeeing that neither * *Muſquettiers* nor *Pike-men* alone, can be ſingly ſufficient of themſelves, to withſtand the able and reſolute *Horſe-man*, (without great *advantage of ground*) on the contrary, the *Muſquettiers* and *Pikes* being *conjoyned* into one *Body*, and being *wel-ordered*, they are not onely able to defend themſelves againſt their *fury*, but alſo to put them to the *worſt*. Yet this muſt not be underſtood of *raw* and *unskilfull Souldiers*, whoſe ignorance is cauſe of diffidence; but of *hardy*, *experienced*, and *wel-exerciſed* men, ſuch as know well how to demean themſelves *couragiouſly* in time of *Fight*. The *words* of *Command* and *Direction* which produce the *Figure*, are as followeth:

The Elephants were ordered into an hollow ſquare by Eudamus their Commander.

Sir Walter Rawleighs *hiſt. mund. lib. 4. cap. 4. ſect. 4. as alſo in the Tacticks of Ælian. & the Notes of the 42. Chap.*

Plinthyum is an hollow four fronted Battell, having direct angles.

** Vnleſſe the Muſquettiers had halfe-pikes, and knew how to uſe them.*

Halfe-files of Pikes, face to the Reere, and martch untill they are cleare of the laſt-Rank of Muſquettiers.

Note that all the Muſquettiers muſt be in the midſt, and the Pikes on the flanks, when you begin to make this Figure. If your Muſquet be on the flank when you make it, then the Croſſe will be Pikes, and the Angles Muſquets, &c.

Secondly, command,

Halfe-files of Muſquettiers, face to the right and left, (then) *march between the diviſions of Pikes.*

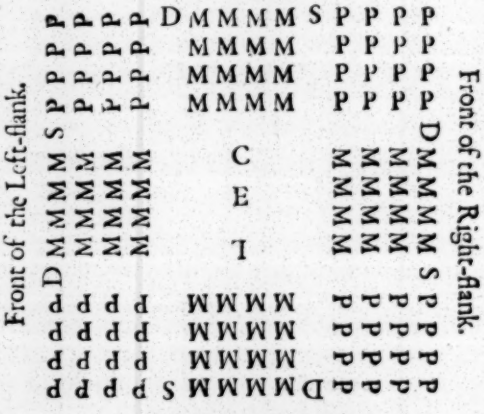
Thirdly, command,

Left-halfe-ranks of the firſt-diviſion of Muſquets, face to the Reere, and march between the Reer-diviſions of Pikes.

Laſtly, having *evened* their *Ranks*, *ſtraightened* their *Files*, and *cloſed* their *Diviſions* to an *equall diſtance*, and being rightly *faced*, the *Body* will ſtand like the following *Figure*.

The Plinthyum, or four-fronted Battell.

Front-proper.



The Plinthyum is an hollow ſquare-Battell, fronted foure wayes, the number equall in length and depth. Another kind of Plinthyum is to have the depth exceed the length; the light armes to be placed in the midſt of the hollow part. See the Tactick of Ælian, the ſecond book, the notes of the 42. chapter.

The manner of the *Firing* may eaſily be apprehended by the *Figure*; the *Muſquettiers giving fire* in *Ranke*, and *wheeling* all *off* to the *Right*, doe then paſſe down their *Intervals*, under the favour of their *Pikes*, placing themſelves in the *Reere* of their own *diviſions* of *Muſquettiers*; the *Pikes charging* at diſcretion. Having *fired once*, *twice*, or *oftner* over, and ſtill maintaining the ſame ground, the *Figure* will continue to be the ſame.

If the *Reer-part* of the *Battell* was by any means ſecured, ſo that you need *give fire* but three wayes, then the *Front-halfe-files* of *Muſquettiers* might have been preſerved intire.

This *Plinthyum*, or *four-fronted Battell*, may as well be made with the *Muſquettiers* in the *Angles*, ; the *Pikes* making the *Croſſe*: this kind of *Command*, alwayes making the *Croſſe* of the *Armes* in the *middeſt* of the *Battell*.

The reducement of the Plinthyum into the ſollid ſquare, flanked with Pikes.

After that you have *given fire*, at diſcretion, upon this *Figure*, and *charged* your *Pikes*, if you would *reduce* them to the firſt *Square*, command the whole *Body* to *face* to the *Front-proper*.

Secondly, command the *Muſquettiers* in the *Reere* to *march-up* on the *left* of the *Muſquettiers* in *Front*; the *Pikes* being firſt *opened*, to give them place.

Thirdly, cauſe the *Muſquettiers* in *flank* to *face-inward*, and to *cloſe* their *diviſions*.

Laſtly, cauſe the *Pikes* to *march-up*, placing themſelves right after their *leaders*.

This being done, the *Body* will be brought again into a *ſollid Square*, *flanked* with *Pikes*. I forbeare further to *reduce* them untill I ſhew the next *Figure*. Yet, for further ſatisfaction to any that ſhall require it, command your *Muſquettiers* to *face* to the *right* and *left outward*;

outward; the *Pikes* to *face-inward*, and ſo to *interchange ground*; and then being right-ly *faced*, they are *reduced*. *The perfect reducement.*

CHAP. CIII.

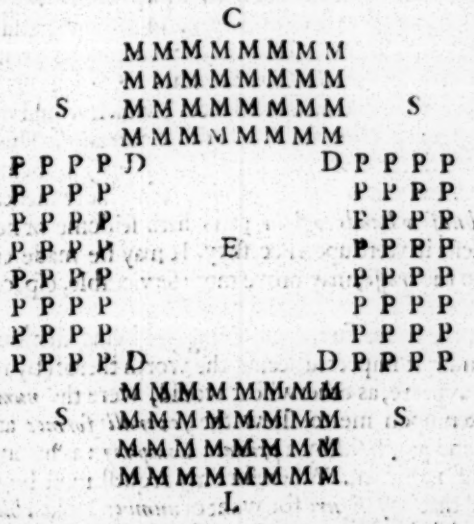
Another hollow ſquare for March.

SUndry *formes* there be which goe under the denomination of the *hollow ſquare*, and very diverſly they may be framed. Some are hollow, *impalled* with *Pikes*; the *Pikes* againe, *girdled* with *ſhot*, and they *impalled* with *Pikes*. Some againe, with diviſions of *Muſquet-iers* and *Pikes*; orderly mixt with an *hollow* in the midſt. A fourth ſort is when each *armes* are divided by themſelves, as when the *Pikes* make the *front* and *reere*, and the *Muſquet-iers* the *wing*. A fift way is, when the *Muſquettiers* lead in *front* and *reere*, and the *Pikes* make both the *Flanks*. All theſe waies are very neceſſary and uſefull, as the time, occaſion, or place ſhall give cauſe; or the judgement of the *Commander* ſhall ſee fitting. Neverthe-leſſe the *hollow Battell*, which I now intend to demonſtrate unto you is eſpecially uſefull for a *march*, whereby to ſecure the *carriage*, as likewiſe to preſerve the ſicke and wounded; it may alſo ſerve for the *Commander* to conſult with his Officers, or to make any *Speech* or *Oration* to the Souldiers. Or the *Enſigne* may in ſigne of triumph, diſplay his *Colours* in the midſt upon a *march* after *Skirmiſh*. *As it now is the cuſtome after exer-ciſe.*

The way to make this *figure* (the *Muſquettiers* being in the *midſt*) is as followeth. Firſt, ſo *command* the *halfe-files* of *Muſquettiers to face the Reere*:

Then Command all the *Muſquettiers to march, and the Pikes to ſtand.*

When they are cleere of the *front* and *reere* of the *Pikes*, let them ſtand, and *face* all to the *Front-proper*: and it produceth this following *Figure*.



If the *firing* be onely intended to the *front*; then *command* the *Muſquettiers* of the *reer-diviſion*, to *open* to the *right* and *left*, and to ſleeve up on the *out-ſide* of the *Pikes*, on to this *reere preſenting* and *firing* at the ſame inſtant, with the *Muſquettiers* of the *Van*: each *firing.* *part wheeling-off*, and placing themſelves in the *Reere* of their owne *diviſions*. This *firing* both conceive the *reere* to be by ſome meanes ſecured But if you preſuppoſe a *Charge* to be given to the *front* and *reere marching*, it may be retaliated (or acquitted) ſtill conti-nuing

nuing the *march*. Nevertheleſſe the inſolence of the *Enemy* will ſcarſe be repelled, or abated, without an *Alt*, and *facing about* to the *Reer-half-files*; the which being performed, the *Muſquettiers* are to *preſent*, and *give fire*; *wheeling-off* by *diviſion*, and placing themſelves in the *reere* of their owne *diviſions* of *Muſquettiers*; each *ranke* moving forward into their *leaders ground*: and doing the like. If you ſhould *give fire*, and not move forwards into your *leaders ground*, then the *Muſquetiers* would fill the hollow in the midſt between the *Pikes*. Nevertheleſſe, ſuppoſe the *Figure* ſtill to continue to be the ſame, becauſe I will now come to the *reducement*, and the rather, for that I have not done it ſince I began with the *Hollow-fronted Croſſe*. But now (ſo pleaſe you) I will *reduce* all by a *firing*. And to that end, firſt, cloſe your *diviſions* of *Pikes*; and then the *Muſquettiers* will be all in the *front* and *reere*.

The Reducement by a firing, the which is not expreſt in Figure in this place: it is in Chap. 38.

Secondly, cauſe the *halfe-files* (both *Muſquettiers* and *Pikes*) to *face* to the *Reere*. Then cauſe the *Muſquettiers* both of *Front* and *Reere*, to *give fire*, *wheeling-off* by *diviſion*, and *flanking* their *Pikes*. When they have *fired* all over, the *Pikes* may *charge*: who being againe advanced, and all *faced* to the *front-proper*, they are all *reduced* (as at firſt) into the *ordinary ſquare*, *flanked with Muſquets*.

CHAP. CIV.

Of the hearſe-Battell, and of the hollow Hearſe, and Croſſe.

Taſticks Chap. 30. The uſe of the Hearſe.

THe *Hearſe-Battell*, by the *Greekes* called *Orthophalanx*, as in *Elian*, *is when the depth doth manifold exceed the length, thrice at the leaſt. As when our Companies marteh forth by right inductions* (or in *ſucceſſive diviſions.*) It is a *figure* eſpecially uſefull for *march*, becauſe that upon thoſe occaſions, a *Body drawne out in length* would meet with many *lets* and *impediments*, by reaſon of the variety of grounds, and other *accidents*, the which they muſt comply withall in their way. Sometimes incountring with *woods* and *buſhes*, ſometimes with *hills* and *ſtraights*, ſometimes with *rivers*, *bridges*, *ditches*, *pits*, *quagmires*, and many other the like inconveniences; which would quite breake the *order* and *array* of any other *figure*, having the *length* more *extended*. This *forme* is alſo held the beſt for *march* in the night; becauſe the *range* (or *breaſt*) not being long, the *order* may be the Better *preſerved*. and the *march performed* with more ſilence. But of all other, it is the *weakeſt*, *bringing but few hands to fight*; and hath ſeldome or never been *uſed* by any good *Commander*, unleſſe it were upon neceſſity. It may be made either *ſollid* or *hollow* and being conjoyned to the *croſſe*, may prove more ſerviceable, eſpecially for the ſecurity of the *Carriage*.

If it were not for theſe impediments it were better to march in forme of Battel; with the front & wings extended at length.

The Hearſe Battel of all other, the weakeſt for fight.

True it is, that were the *forme* farre more *ſtrong*, yet being demonſtrated, by ſo ſmall a *number*, might well render it ſuſpected: ſeeing the worth therof (by reaſon of the *thinneſſe*) could not ſo evidently appeare, as otherwiſe it would, were the *number larger*.

But I have onely taken upon me to ſhew the *ſeverall formes* and *figures* of *Battell* which may be *formed* and *practiſed* by a *private Company*: as having *limited* my ſelfe, not to exceed the number of 128 men. Wherefore my requeſt muſt be that the *courteous reader* when he ſhall find that any *figure* for want of *number* looks *thinne*, (or poore) he will there be pleaſed to *cloath* it in a larger *number*: for that thereby the *Battell* will appear the more *ſollid*, and the *beholder* become the better *ſatisfied*.

This figure fit for a convoy.

This *figure* may in like manner be *uſefull* for a *Convoy*: the *hollow parts* thereof, being very *commodious* to *ſecure* the *carriage*: the men alſo are very well *diſpoſed* to *help* and *aſſiſt* each other, in whatſoever part it ſhould happen them to be *aſſailed*.

The words of *Command* and *Direction* which produce the *figure*, are as follow.

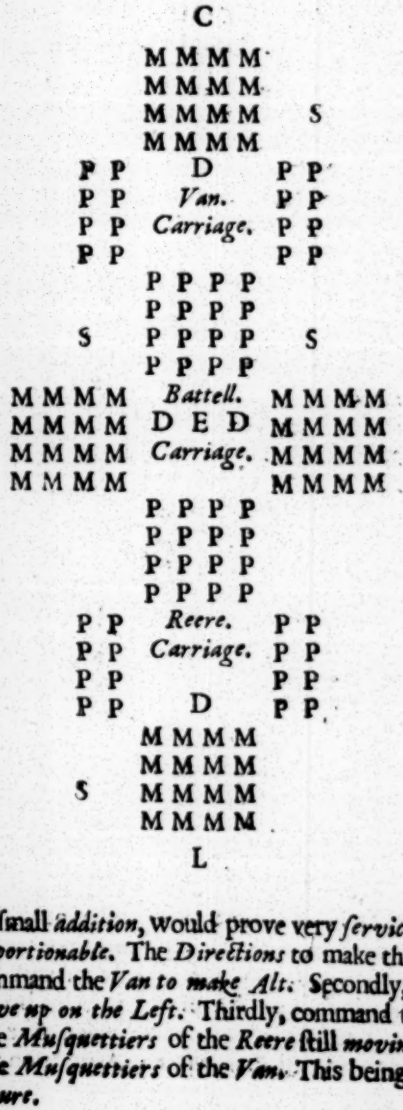
Wheele front and reere into the left-flanke.

That done, *face* them as before, and the *Muſquettiers* will be in *Front*, *Midſt*, and *Reer*. Next, *open* the *Muſquettiers* in the *midſt* to the *right* and *left*, and cauſe them to *double* their *Ranks* to the *left*. *The direction to make this Figure with a private Company.*

Then cauſe the *Front-halfe-files* of the *Front-diviſion* of *Pikes* to *open* to the *right* and *left*; and the *Reere-halfe-files* of the *Reere-diviſion* of *Pikes* to doe the like.

Then, having *evened* their *Ranks*, and *ſtraightned* their *Files*, and being *faced* to their *Leader*, the *Body* will ſtand in *forme* like this enſuing *Figure*.

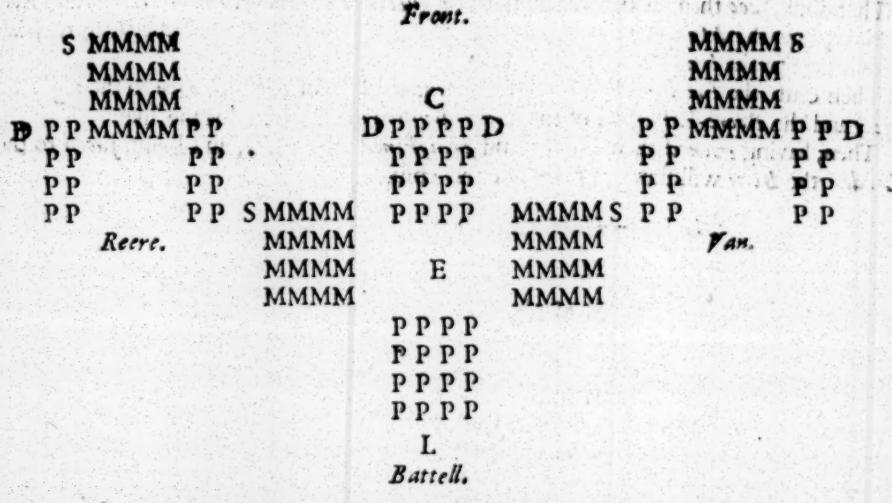
The hollow Hearſe and Croſſe.



If ſo be you will *give fire* upon this *Figure*, you may doe it any way, or every way. If you *give fire* to the *Front*, *Reer*, and *Flanks*, then let your *Muſquettiers wheele* all *off* to the *right*, and *place* themſelves in the *Reere* of their owne *diviſions*. If you would ſtill preſerve the *Figure*, then let every *Ranke* (before they *give fire*) *martch-up* into their *leaders ground*. *The direction to this firing.*

Having either *martched* or *skirmiſhed* in this *forme*, before I come to the *Reducement*, I will draw one other *Figure* from it; the which I conceive, with ſome ſmall *addition*, would prove very *ſerviceable*, even for a *pitcht Field*, were the *number proportionable*. The *Directions* to make this *Figure*, are as followeth.

Firſt, command the *Van to make Alt*. Secondly, command the *Croſſe* (being the *Battell*) *to ſleeve up on the Left*. Thirdly, command the *Reere to ſleeve-up to the Left of the Battell*; the *Muſquettiers* of the *Reere* ſtill *moving forwards*, untill they *ſtand even ranged* with the *Muſquettiers* of the *Van*. This being rightly perfoſmed, produceth this following *Figure*. *The direction to make the enſuing Figure.*



This *Figure*, although here demonſtrated by the *number* of a ſingle *Company*, yet carrieth the *port* of a * *Regiment*; borrowing the denominations of *Van*, *Battell*, and *Reere*: and may, at the direction of the *Captaine* (or other *Commander*) be ſo *ordered*, and the *Firing performed* accordingly. The *Van* and *Reere*, making the *Wings*, may ſend forth [a] *looſe files* to begin the *Skirmiſh*. Secondly, they may [b] *give fire even-a-breſt*. Thirdly, the *Battell*, *ſlowly advancing*, may *give fire* at diſcretion. Upon all theſe *Firings*, the *Muſquettiers* are to *wheele-off* to the *Right*, or to the *Right* and *Left*, taking their places according as direction ſhall be given. Laſtly, to come to the [c] *Reducement*: Firſt, *martch forth the Van*; the *Battell*, and the *Reere*, falling ſucceſſively into their [d] *places*. Secondly, command the *Pikes of the Van and Reere to face inwards, and cloſe their diviſions*. This being performed, cauſe the *Muſquettiers of the Battell to double the files to their right*, and in like manner *to face and cloſe their diviſions*. Laſtly, *wheele Front and Reere into the Right-flank*: Which being done, and the *whole Body* again *faced* to the *Front-proper*, all will be *reduced*, as at the firſt.

* *This Figure eſpecially proper to a Regiment.*

[a] *Note in Chap. 73. the directions of firings by forlorn files.*

[b] *The looſe disbanded files being returned, the Wings begin to give fire even-a-breſt.*

[c] *The reducement.* [d] *Making again the hollow Hearſe and Croſſe.*

CHAP. CV.

Of the hollow Square, girdled with ſhot.

THe *hollow Square, girdled with ſhot*, is a *Figure* to be uſed in times of neceſſity, when as the *Commander*, well fore-ſeeing hee ſhall be enforced to *fight* (with great diſproportion of *number*) hee therefore wiſely and timely takes the benefit of ſome * *advantagious ground*; thereon ſpeedily drawing forth, and *imbattelling* his *Army* into this *forme*. And that nothing may be wanting, or through neglect expoſed to *danger*, the which by any meanes may be *ſecured*, all the *Carriage* (which otherwiſe would not prove *ſerviceable* and *available*, for the better *ſtrengthening* and *fortifying* ſome part or other of the *Battell*) ſhould be ſafely placed in the *midſt*. And leſt the adverſe part taking advantage to breake in at any the ſpaces between the *Angles*, ſhould thereby breed confuſion, or *breake their array*, they are ſuddenly to *impale* thoſe *parts* which offer themſelves as *weakeſt*, (and leaſt *defenſible*) with ſharp-pointed *Palliſadoes*: A weapon, which hath ſome-

* *Vneven, rough, buſhy and hilly grounds, are all lets and impediments to the Horſe.*

ſometimes been uſed by our[i] *Engliſh Bowmen*, with good *ſucceſſe againſt the French*: and now of late, in our [k] owne time, by that worthy *Hero, and Prince of matchleſſe memory*, Guſtavus Adolphus *King of Sweden, in his warres of Pole, and Germany, joyning the ſwines-feather with the Muſquet, as a reaſonable defence againſt the incurſions of the Horſe.* The uſe of which weapon is now practiſed and taught here amongſt us: by that *worthy Gentleman, and expert Souldier, Captain Henry Tillier.*

[i] *At Agincourt.*

[k] *Palliſadoes have likewiſe bin uſed of late in the Eaſtern warres by the name of ſwines feathers.*

But to returne: thoſe parts which lye moſt open to the *fury* of the *Enemies Horſe*, ought to be impaled with *palliſadoes (or ſwines-feathers)* as aforeſaid: or if thoſe kind of weapons be wanting, then ſupply that defect, by ſpeedy caſting up a *rampart or breſt-work* of earth in each needfull place. Nevertheleſſe if time permit not, or that the ground be not *feaſable*, then the *Wagons, Carts,* and other *Carriages*, may be ſo orderly placed, that of themſelves they may be ſufficient to *fortifie*, and *defend* thoſe *places*, which otherwiſe would lye *too open* to the invaſion of the *Cavalry.*

The Muſquettier well experienced in the uſe of the half-pike either in ſtreight or campania will be too hard for the Horſe.

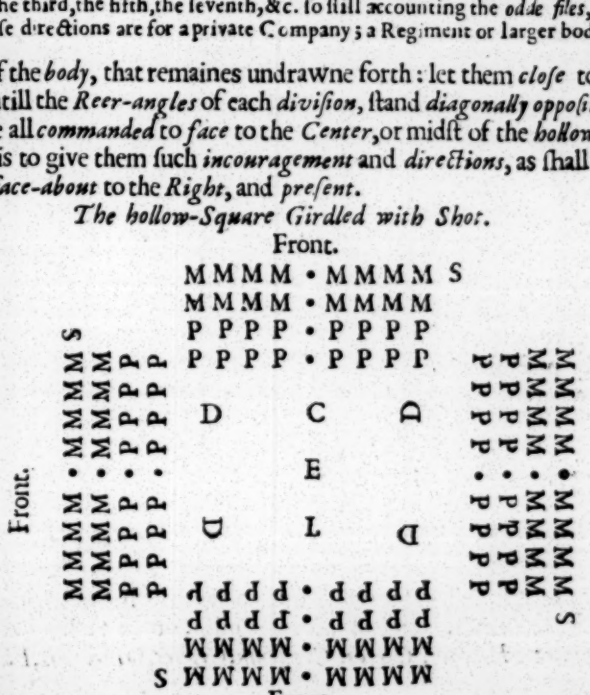
This *Figure* may be as well made with the *Pikes* fore-moſt: but becauſe that the *Muſquettiers* may more commodiouſly *fight* before their *Pikes*, and with leſſe danger to their own *body*: therefore I conceive it fitteſt at firſt to place them in *front* of their *Pikes*. And if the *enemy* ſhall too *hotly preſſe* them with his *Horſe*, then at the diſcretion of the *Commander*, they may ſafely *retreit* behind their *Pikes*; the *Pikemen making good* the *ground of the Muſquettiers*. For better ſatisfaction, obſerve the *direction* to make the following *Figure*. Firſt, *command a Serjeant to draw forth* all the [l] *odde files* of the *right-flanke*, (both *Muſquettiers* and *Pikes*) and *wheele* them to the *left, croſſe* the *front*, That being done, *command* the odde *files* of the *left-flanke*, (as well *Muſquettiers* as *Pikes*) to *face* to the *reer*, and let them in like manner be *wheeled* to the *left, croſſe* the *reer*, following their *bringers-up.*

[l] Note that the *odde* files on the *right-flank*, are the *out-moſt files* to the *right*, the *third file*, the *fifth file*, the *ſeventh*, and ſo forward (for the reſt, if the *Body* be larger) beginning your account from the *outer-moſt file* to the *right* Note, that the *odde files* on the *left-flanke*, are the *left-hand-file*: the third, the fifth, the ſeventh, &c. ſo ſtill accounting the *odde files*, beginning with the *outer-moſt file* to the *left*. Theſe directions are for a private Company; a Regiment or larger body muſt be otherwiſe ordered.

For the reſt of the *body*, that remaines undrawne forth: let them *cloſe* to the *right* and *left outward*; untill the *Reer-angles* of each *diviſion*, ſtand *diagonally oppoſite* to each other. Then let them be all *commanded* to *face* to the *Center*, or midſt of the *hollow-ſquare*, where the *Commander* is to give them ſuch *incouragement* and *directions*, as ſhall be meet.

Laſtly, let all *face-about* to the *Right*, and *preſent.*

The hollow-Square Girdled with Shot.



For

For the manner of *firing* upon this *Figure*, it is as followeth, [a]The *firſt rank* of *Muſquettiers* (to each *Front*) having *preſented* and *given fire*, they are to wheel all off to the *right*. And becauſe that eight or ten men, are too many to *wheele downe* one *Intervall* (for that they will bee ſo long, before they can cleere the *Front*) therefore you may cauſe *Intervals* to be made, betweene the midſt of each *diviſion*, as you may perceive in the *Figure*. The *firſt ranke* having *fired*, and *wheeled-off*, the *next ranks* are to *moove forwards* into their *ground*, they which *wheeled-off*, in the meane time placing themſelves in the *reere* of their *owne diviſions* of *Muſquettiers*. The next *ranke* of *Muſquettiers* having *fired* in like manner, are to *wheele-off*, and to place themſelves as aforeſaid, the [b] *reſt of the ranks* of *Muſquettiers*, (ſucceſſively) are to doe the like, untill they have all *given fire*, (once or oftner over) that way, according to the occaſion. And in this *interim* may the [c] *Bow-pike-men* be bountifull in beſtowing their *ſhowres* of arrowes, amongſt the thickeſt of their *Enemies*.

[a] *The direction for this firing.*

[b] *If there be more rankes of Muſquettiers then is repreſented in this figure.*

[c] *The Bow-pike-men (if at any time uſeful) have in this figure good meanes to imploy their dexterity.*

If the *Horſe* prevaile ſo much, that the *Muſquettiers* may not endure to beare the *brunt* of them: then let the [d] *Muſquettiers* (after they have *fired*,) *wheele-off*, and place themſelves in the *reer* of their following *diviſions* of *Pikes*: they *moving forwards*, and *maintaining* the *Muſquettiers ground*; *charging* with their *Pikes* (as they ſee occaſion) for *ſecuring* the *Muſquettiers* in the *midſt*. This notwithſtanding, if the *enemies horſe* ſhall ſtill *preſſe forwards*; and with their *ſhot* ſhall continue to *annoy* the *body* (the *Pikes* on this *figure* being eſpecially *defenſive*:) then cauſe the *Pike-men* to *charge* at the *foot*, and your *Muſquettiers*, to *give fire* over them: according to former *directions* on the *Convex halfe-moon*. After this manner, the *battell* may be continued to the *laſt ranke*. When you have *given fire*, in this order, your *Muſquettiers* being all in the *reere* of your *Pikes*; if you be minded to *reduce* them into the firſt *orderly ſquare*, this is one way for it. *Paſſe through* your *Muſquettiers* before your *front* of *Pikes*, as they were before the *firing*: that being done, let the Commander *face* the whole *body* to the *left-angle* of the *front-diviſion*, by which means hee ſhall there find the *halfe* of his *file-leaders*. This being performed, let them *martch*: and ſo *even* their *rankes* and *ſtraighten* their *files*; the *reer-diviſion* of *Muſquettiers* and *Pikes*, orderly following after the *front-diviſion* of the like *Armes*. After this let the *half-files* which then are (which indeed are the *reſidue* of the *file-leaders*) *double* their *rankes forwards* to the *left*: which being performed, the *men* are *reduced* as at firſt.

[d] *The ſecond way of placing the Muſquettiers.*

A thirdway of firing on this figure.

The reducement.

If you would *reduce* them ſome other way, without *paſſing through* your *Muſquettiers* (as I have formerly ſaid) then firſt let the *whole body face* to the *left-angle* of the *front-diviſion* and *martch*, *evening* their *ranks* and *files*, as aforeſaid. Which being done, cauſe the *halfe-files* (which then are) to *double* their *front* to the *left*; which being in like manner performed, all your *Muſquettiers* are ſtill in *midſt*. Your next worke is, to cauſe your *Muſquettiers* to *face* to the *right* and *left outward*: and your *Pikes* contrariwiſe, to *face inward*; and ſo to paſſe through, and interchange ground. Thus being *faced* to their *front-proper*, they will be *reduced*, as at firſt.

A ſecond way of reducement.

If any will be practiſing of this form of *battell*, with a ſmaller number of men (as with 64. or fewer) whereby they will be conſtrained to double their *halfe-files*, then they will be *reduced* the ſame way; onely they ſhall not need to *double* their *halfe-files* againe in their *reducement*: as they muſt needs doe, were the number larger.

CHAP. CVI.

Of the ſolid Square, with Muſquettiers in Center and Angles. The way to make the Figure with a private Company: how to fire upon it, and to reduce it.

INfinite are the formes and Figures of Battell which may be made: yet all differing either in circumſtance or matter. Some of them are Sollid, others Hollow: ſome of them, being *Trines*, *Squares*, *Hearſes*, *Cirtes*, *Creſſents*, *Croſſes*, *Diamonds*, *Plinthiums*, *Pleſiums*, *Parameles*,

Paramekes, and *infinite* others, Some of them taking their denomination from the nature of their *numbers*. Others according to the *placing* of each *Armes*. A third ſort, taking their names from things they moſt reſemble, all of them being neceſſary to be knowne, to ſuch which would be accounted skilfull [c] *Serjeant Majors*: that ſo with all *numbers*, upon all occaſions, they may readily bring their *Souldiers* into any form or figure of battell (according as the time, the number, and place will give them leave) for oppoſition either of horſe or foot, or of both conjoyned.

[c] *Majors ought to be of ſingular skill and experience that ſo they may at all times be able (having obſerved the ſcituation and place) to draw their men into formes moſt advantagious to themſelvs, and offenſive to their enemies.*

Excellent was the Cuſtome of that worthy *Philopemon* the *Achaian*, who when he walked or travelled abroad with his friends and familiars, would marke and peruſe the ſituation of the Country about him: and ſo contrive and diſcourſe to his companions, that if it ſo happened an army to *martch* that way, then he ſuppoſing to have under his [f] *command* ſuch a number of *Souldiers*, ordered and appointed in ſuch a manner, and *martching* towards ſuch a place; where being upon ſuch a ground encountred, by the greater and better prepared Army: Then would he put the queſtion, whether it were fit for him to hold on his way, *retire*, or *make an Alt*: what *peece of ground*, were meeteſt for him to *ſeize on*, and in what *manner* beſt to doe it; in what *forme to order his men*, and how and in what numbers to place *each Armes*, where to *beſtow his carriage*, and under what *guard to leave them*. Next would he propound, if that the *enemy* were for the preſent *beat-off*, then how with the moſt *conveniency to encampe that night*, which way, and in *what manner* were his *beſt to martch the next day*, by theſe and ſuch like continuall diſcourſes and meditations, he was growne ſo *exact* and *perfect*, that he never met with any difficulty, whence he could not explicate himſelfe and followers.

[f] *This kind of practiſe and meditation, an excellent meanes to make men expert in this Military trade. Our deboiſt roaring rabble, (who aſſume onely the habit of Souldiers to make them ſeeme to be ſuch) never ſpend their times after this worthy and vertuous manner. Nor indeed hath any attained to be eminent in this Military way, whoſe ends and aimes have bin baſe and covetous; But ſuch, and onely ſuch, whom love of vertue hath indeered to imp their wings with the plumes of honour.*

Now after ſo large a digreſſion, return we back to our *ſingle Company*; the work of this *Chapter*, being to ſhew the *Pleſium* or *long ſquare*. In which the *Muſquettiers* are *halfe* in the *midſt* of the *Pikes*, and the other *halfe equally divided*, and *placed* on the *four angles* of the *battell*: the *Pikes* making *foure diviſions*; as being *placed* upon the *front*, *reere*, and *flankes*. But not to hold you with longer *circumſtance*, take theſe *words* of *command* and *direction*, which produce the following *Figure*.

The Command is, *Foure middle-moſt ranks of Muskettiers and Pikes, interchange ground.*

For further direction, cauſe the *foure middle rankes of Muſquettiers* to *face to the right and left inward.*

That done, cauſe the *foure middle-ranks of Pikes* to *face to the right and left outward*; then let them *move* and *interchange their places*. This done, and *faced* to the *firſt-front*, produceth the inſuing Figure.

The Pleſium.

E C

S MMMM D PPPPPPPP D MMMM S
MMMM PPPPPPPP MMMM
PPPP MMMMMMMM PPPP
PPPP MMMMMMMM PPPP
PPPP MMMMMMMM PPPP
PPPP MMMMMMMM PPPP
MMMM PPPPPPPP MMMM
S MMMM D PPPPPPPP D MMMM S

L

S F

If you would *give fire* upon this *Figure*, it may be performed either to the *Front* and *Reere*, to the *Right* and *Left*, or to all *foure* together. But which way ſoever the *Firing* be, let the *aſpect* of the *Muſquettiers* in the midſt be turned the ſame way; and cauſe the *Pikes* which ſtand before them, to *charge* at the *foot*, and the * *Muſquettiers* in the *Center* to *give fire* over them. The *firſt-rank* having *fired*, let them kneel (or crouch low) upon the ground, *making ready* again, whileſt the next *Ranks* behind them *give fire*, and doe the like: and ſo forwards for the reſt. Having all *fired* once over this way, let them riſe up, and (if need be) *give fire* over again, after the ſame manner. The *Muſquettiers* on the *Angles* (in the interim) *giving fire* after the ordinary way, *wheeling-off*, and falling in the *Reere* of the *Muſquettiers* of their owne *diviſions*; the others in the mean time *moving forwards*, and making good their *leaders ground*. This being done, and the *Pikes* having *charged*, the *Figure* will ſtill continue to be the ſame, without alteration; and that as well in *men*, as *matter*, if ſo be the *Firing* be performed according to the former *direction*, either in the Book, or Margin.

* *The Muſquettiers in the midſt of the Battell may give fire by Extraduction, which will be a better way then to give fire over the Pike-mens heads.*

The Reducement.

For *Reducement*, command the *foure middle-moſt Ranks of Muſquettiers and Pikes to interchange ground*, and they will be *reduced* as at firſt.

If this be not plain enough, obſerve theſe following *directions*: *Muſquettiers of the middle-diviſion, face to the Right and Left outward: Pikes of the flank-diviſions, face to the Right and Left inwards*: this done, let them *move into each others places*, and *face to the Front-proper*, and they are rightly *reduced*.

CHAP. CVII.

Of the double Croſſe-Battell, and ſeverall other formes from thence proceeding.

I Shall now proceed to ſhew ſome *formes*, for the *imbattelling* of larger numbers: It being one of the moſt principall parts of the *Art Military*, to *arange* your *Battells* into ſuch *forms* as may bring moſt *hands to fight*, with conveniency, ſo that one part of your *Battell* doe not *cumber* or *hinder* the other; but by their orderly placing, they may be *aiding* and *aſſiſting* to each other: appointing to every *part*, *maniple*, or *diviſion*, their due number; what order they are to keep, *when* and *how* they ſhall *fall-on*; that ſo there may be no diſturbance in time of *fight*. Therefore, in the *ordering* of your *Battels*, you ought to be carefull of what may happen by *caſualty*, *or chance of fortune*; that ſo by a timely fore-ſight you may provide *remedies*.

Eſpecially take notice, that you alwayes have *Reſerves* ready, both of *horſe* and *foot*, (if you have them in the field) that ſo by their *timely aſſiſtance*, the *broken* and *diſtreſſed parts* of the *Battell* may be *upheld* and *relieved*. For many times it ſo * happeneth, that ſuch a *Reſerve* may be an eſpeciall cauſe to gain a *Victory*; the want thereof (to the contrary) may be a means *to hazard the loſſe of all*. Of this you may read examples enough in all *Hiſtories*, both *ancient* and *modern*. But I forbeare to wade further into theſe diſcourſes, and therefore return to the work of the Chapter.

* Witneſſe *Ceſars* Reſerve at the Battell of *Pharſalia*, and infinite others ſince. And indeed, no good Commander drawing forth his Battalions into what form ſoever, but hee will alſo provide and place convenient Reſerves, both of Horſe and Foot.

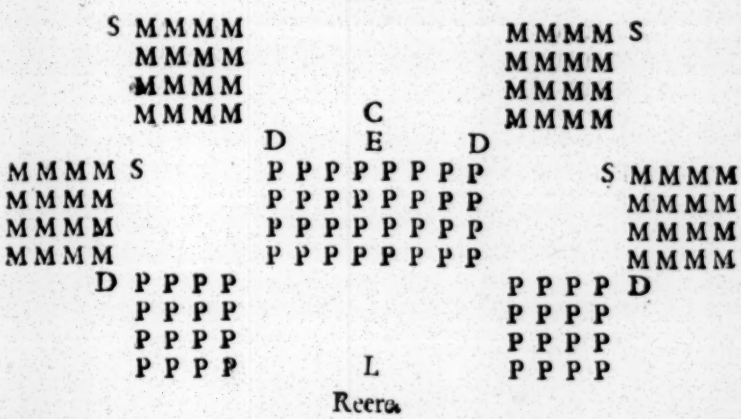
Some *Commanders* have *ranged* their *Armies* into one onely *Battell*, without either *Wing* or *Reſerve*: ſome into two; others into three; ſome into foure; ſome into five; ſome ſix, ſeven, eight, nine; and ſome into more. Now although that this ſmall number that I have pitched on, be not ſufficient to demonſtrate the *Figures* ſo perfectly (when they are divided into many parts) as larger numbers would make them appeare, yet accept of them as they be; for I have purpoſely choſen ſo ſmall a number, that ſuch *Captaines and Gentlemen as pleaſe, may make uſe of them in their practice*. The *Command*, *Direction*, and *Figure*, followeth.

The

The Command is, *Muſquettiers march, untill your halfe-files range even with the Front of Pikes, then ſtand.*

Halfe-files (of each Armes) face outward, and march untill you are cleare of the Angles of your own Arms, then ſtand: face all to your Leader.

Front.



If this Firing were to the Front and Reere, then the two laſt diviſions of Pikes may be Muſquettiers, the Pikes placed even with the Reere-angles of the Muſquettiers in Front.

Your *Body* being drawn into this *forme*, it ſtands aptly for *Firings* in *Front*; but may very fitly ſerve for to *give fire* to the *Front* and both *Flanks*. If you would *fire* to the *Front*, and preſerve your *Figure*, then the *Muſquettiers* muſt move forwards into their *leaders ground*. If you pleaſe, you may move forwards your *Reer-diviſions* of *Muſquettiers*, and make *wings* of them, to begin the *Skirmiſh*. Having *fired* once or twice over, they may *retreit* into their places; and then the *Front-diviſions* may entertaine the *Skirmiſh*, and *fire* two or three times over. The *Reer-diviſions* may alſo *give fire* with them, at diſcretion of the *Commander*. The *Pikes*, in the mean time, are to *advance, move forwards, port, charge, ſtand, retreit*, all according to the *direction* of their *Command*, or *beat* of the *Drum*.

This Figure fit to fire to the Front and both Flanks.

Skirmiſhing in Front with wings.

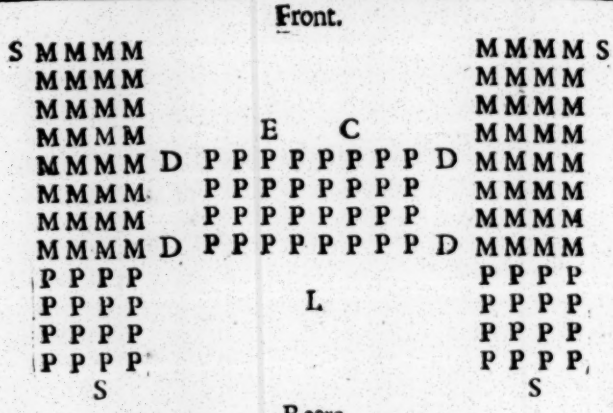
If you would *give fire* to the *Front* and both *Flanks*, at one and the ſame time, then the *Front-diviſions*, both of *Muſquettiers* and *Pikes*, keep their *aſpects*, and *give fire* to the *Front*: the [a] *Reer-diviſions*, as well *Muſquettiers* as *Pikes*, *face to the right and left*, *firing* to the *Flanks*. If they *give fire* moving forwards into their *leaders ground*, then they continue the *Figure*. And if the *Commander* think fit, the [b] *Front-diviſions* may move forwards, and maintaine their *leaders ground*; the *Reer-diviſions* of *Muſquettiers giving fire* upon the ground they ſtand, *wheeling-off* to the *right*, (or to the *right* and *left*) placing themſelves in the *Reere* of their own *diviſions* of *Muſquets*; the *Pikes* may *port*, and *charge*, at the diſcretion of the *Commander*. If this be obſerved, it produceth this following *Figure*.

Directions for firing to the Front and Flanks.

[a] *Reere-diviſions are the halfe-file-leaders.*

[b] *This Firing altering the place of the ſuing Figure.*

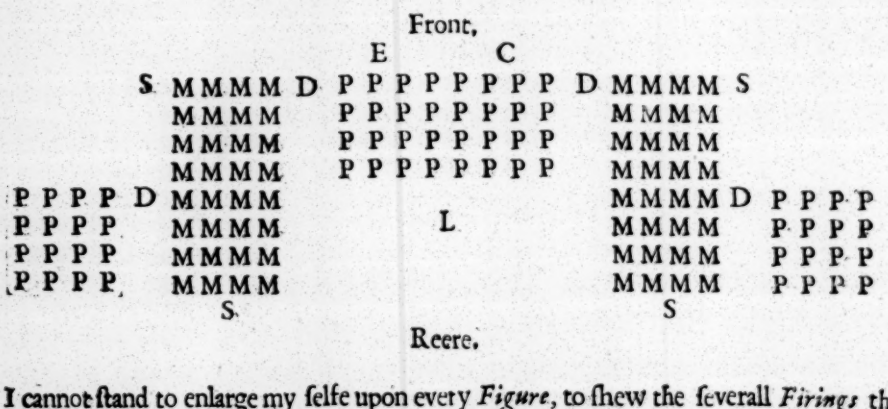
Muſquettiers in Flank, varieth the former forme to this ſuing Figure.



If you will *give fire* on this *Figure*, it is to the *Front*; having *fired* once or twice over, the *Front-division* of *Pikes* may move forwards, *porting*, untill they *range-even* with the *Front* of the *Musquettiers*, and there *charge* their *Pikes*: The *Musquettiers* still continuing their *Firing*. The *Reer-divisions* of *Pikes*, in the mean time, *facing to the right and left-outward, and sleeving-up the flanks of the Reer-division of Musquettiers*; there in like manner *charging* their *Pikes*, either to the *Front* or *Flanks*, according to *direction*; which produceth this following *Figure*.

* *A second way to make this Figure.*

If you would * make this *Figure* from the *Square* (of *Pikes flanked* with *Musquettiers*, it is no more but) Command *Halfe-files of Pikes, face to the right and left-outward, and passe through to the flanks of your Musquettiers*, (then) *stand*, and *face to your Leader*.



I cannot stand to enlarge my selfe upon every *Figure*, to shew the severall *Firings* that may be produced from them; let it now suffice that I demonstrate the *Figure*, and give directions how to *make* and *reduce* them: any ingenious Reader that hath well perused my Book, must needs (by this time) be able to conceive the severall wayes and *Firings* that each *Figure* may produce, almost at first sight. And therefore I will spare the paines, and come to the *Reducement* of this *Figure*, lest the Chapter prove too long. Having *given fire* upon this *Figure*, either to the *Front* or *Reere*, or to both together, and the whole *Body* againe *faced* to the *proper Front*, * Command the *out-most divisions of Pikes to face to the right*

* *Reducement.*

right and left inward, and passe through the Musquettiers into their places: then *face* to the *front*, and all is *Reduced.*

CHAP. CVIII.

Why it is necessary to know variety of formes: the way to make foure severall figures, demonstrated in this Chapter, with their Reducements.

HEe that will *Range his Battalions* alwaies into one *forme*, may be likened to that *Physitian*, or *Chirurgion*, that for all *sicknesses* or sores, hath the selfe-same *potion* or *plaister*. Not considering, that *time*, *number*, *place*, *quality of armes*, and many other like *respects*, will be great sticklers in the ordering of *Armies*. Moreover the number of the *enemy*, his exceeding either in *horse*, or *foot*, the placing of his *Ordnance*, the *order of his array*; any of these or other such like, may induce the *pollitick* and wise Commander sometimes to alter, and vary his forme, as may be most advantagious for himselfe, and *prejudiciall* to his *Enemy*. But proceed we to the *figures* of this Chapter, the which may be done, either by a *single Company*, *Regiment*, or *Army*.* Nevertheless, although I have no more *divisions* of *shot* in my *Figures*, yet if you have numbers sufficient to imbattell, then place more divisions of *Musquettiers* in the *wings*, *front*, *flanks*, *reere*, or any other needfull part, as I have demonstrated by little *printed squares*: So much for the generall, come we now to the particular directions for this following *Figure.*

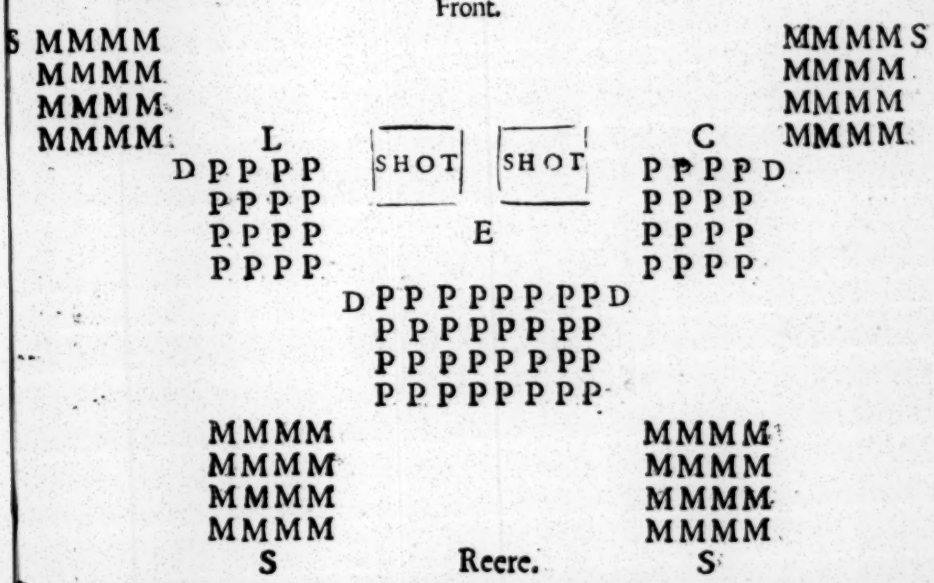
* *He that shal alwaies accustome himselfe unto one forme of battell, gives his enemy too much advantege.*

* *Every Company ought to be two parts shot the third part Pikes.*

Front-halfe-files, face to the right and left, Matrch till your *Pikes* range even with the *Musquets* of the *Reer-halfe-files*, then, *stand, and face to your Leader.*

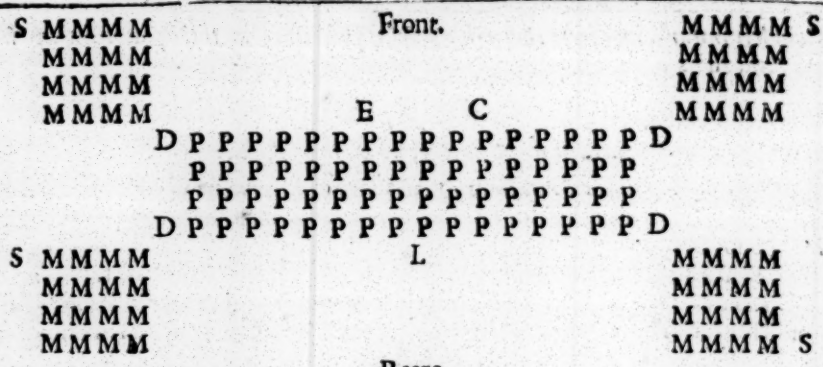
Halfe-files of Musquettiers face to the Reere (that done) *Musquettiers* (*both of front and reer-division,*) *martch to the Angles of your Pikes* (then) *stand*, and *face all to your Leader*, or *proper Front.*

The direction to make this forme with a single Company.



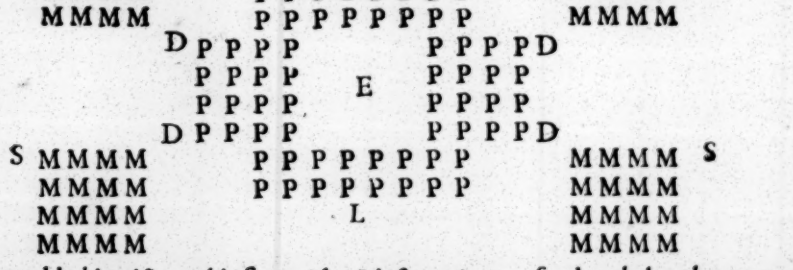
In this *forme* you may *give fire*, to the *front* or *reere*, or both together. You may *give fire*, and still continue your *forme*, or if you please, the *Battell* of *Pikes*, may move forwards, and *Range* with the *flanke divisions* of *Pikes*: the *Reer-divisions* of *Musquettiers facing outward*, and moving after the *Front-divisions* of *Musquets*, even with the *Reer-angles* of *Pikes*, which produceth this ensuing *Figure.*

The way to fire, and alter the form.



* *The Battell of Pikes are those under* E *in the first figure of this chapter.*

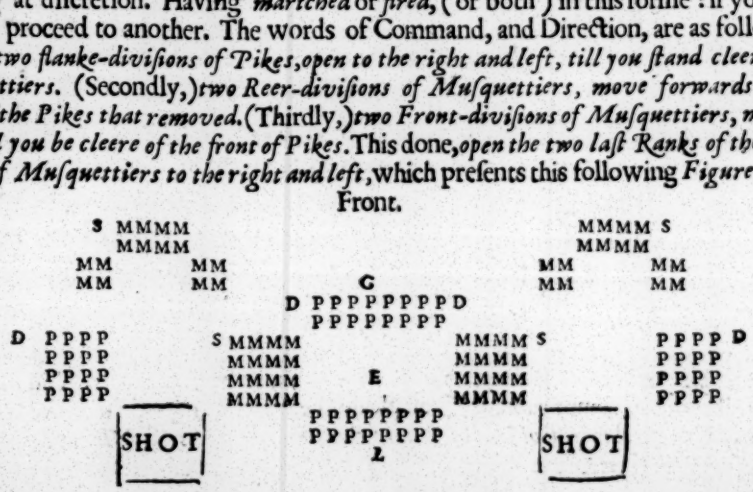
If you cause the *two first ranks* of the* *Battell of Pikes* to move forwards, and the *two last Rankes* of the *Battell of Pikes* to move towards the *Reere*: it will produce this ensuing *Figure.*



If you would *skirmish* on this figure, the *Musquettiers* are so placed, that they may *give fire* any way: the *divisions* of *Pikes* in like manner, either in single *bodies*, or three of them *a-breast*, may move forwards into the *Front*, or if occasion be into the *Reere*, *porting*, and *charging* at discretion. Having *martched* or *fired*, (or both) in this forme: if you please, we will proceed to another. The words of Command, and Direction, are as followeth.

* *Direction to make this figure with a single Company.*

* *The two flanke-divisions of Pikes, open to the right and left, till you stand cleer of your Musquettiers.* (Secondly,) *two Reer-divisions of Musquettiers, move forwards into the places of the Pikes that removed.* (Thirdly,) *two Front-divisions of Musquettiers, move forward till you be cleere of the front of Pikes.* This done, *open the two last Ranks of the first divisions of Musquettiers to the right and left*, which presents this following *Figure.*



When you peruſe this *Figure*, ſleight it not becauſe of the *thinneſſe* of the numbers in each part; but conceive that where two *Ranks* are placed *ſingle*, there for ſervice, peradventure two *Companies* (or more) may be drawn-up; and ſo anſwerable for each other part, according to the *number* and *ground*. When you *give fire* upon this *Figure*, whether with a *ſingle Company*, or more conjoyned, it muſt be in a *Regimental* way. The *Pikes ſtand ready ordered*, if need be, to *relieve the Muſquettiers*. But come wee now to the *Reducement* of our *Company* again to their *firſt-order*, wherewith wee will conclude this Chapter.

Two laſt Ranks (of the Wings) *of Muſquets, cloſe your diviſions. Reer-diviſions of Muſquettiers, move forwards, and cloſe your diviſions, after the Muſquettiers in the Front. Two firſt Ranks of Pikes, cloſe-back to the two Ranks in the Reere. Flank-diviſions of Pikes, face inward, and cloſe your diviſions.* Laſtly, Command, *Pikes, move forwards and even your Front of Muſquettiers.* If there be any *Intervals* (or *Diviſions*) in the *Flanks*, Cloſe them, and all is *reduced* as at the firſt. The reducement.

CHAP. CIX.

The Trained Bands one of the three main ſtrengths of this Land: the wayes to make them perfect Souldiers in the handling their Armes: The Checker Battell; with ſeverall other formes, either for a Company or Regiment.

IT was the *Spartan glory*, being demanded of her *walls*, to preſent a groſſe of *Military bodies*: wherewith they not onely for many Ages defended themſelves; but raiſed their fame to ſo high a pitch, that they became *terrible* to others. Our *In-land*, with *Sparta*, hath no other *Forts, Faſtneſſe*, or *Fortifications*, to withſtand the Enemy, ſave our (I would I might have ſaid *experimented*) *Souldiers breſts*. Take a ſurvey of the whole, and you ſhall ſee, that the ſtrength of our Land (like the *Roman Legions*) conſiſts of our [a] *Haſtati, Principi*, and *Triarii*. [a] Tooke, his Legend of Brittimart.

Our *Sea-men* in their *wooden Forts*, and *Caſtles*: our *Rocks, Shelves*, and *Sirtes*, that *lie-a-long our Coaſts*: and our *Trained Bands* on the *Land*; our *laſt refuge*, and *chiefe Bulwark* of Defence. Now conſidering the *facility* of the two *former*, how carefully ought we to look to the *latter*? That our *Souldiers* be often *practiſed*, and taught their *Poſtures*, and well-handling of their Armes: That there be places provided for the [b] *Muſquettiers* to *ſhoot Bullets* at the *mark*; (and *Prizes* for them that doe beſt:) That there be places appointed for ſome *Squadrons*, and *diviſions* of each *Armes*, to meet but one houre or two in the week (at times moſt convenient) to be inſtructed in *Motions* and *Firings*, by the ſeverall *Officers* of each *Company*: That there might be ſome *Immunity, Priviledges*, or *Allowance*, to the *Officers* of the *Trained Bands*, towards their expence of *time* and *charges*: That there ſhould be countenance and incouragement given to thoſe that are diligent in the practice of *Armes*, and the ſtudy of the *Art Military*. Theſe, and ſuch like *honey dewes*, would water the parched barrenneſſe of our *Militia*, and fatten the root, to a fragrancy of *experiment*: initiating, and ſupplying the nerves and joynts, to an activeneſſe of *motion*. The want hereof, leaves us *dull* and *ſnoring* in the lap of *ſtupid ſecurity*; and renders us *ridiculous* in the *eyes* of our *Enemies*. [b] *Many of the Trained Bands dare not ſhoot a Bullet for want of practice. And very few know what proportion of powder to uſe to give the due charge.*

But pardon my digreſſion, *the zeale of my Countries good had almoſt intricated my intentions; caſting me a-ſhore where I had not the leaſt intent to ſee the land.* Now, with your good leave, I returne to the work of this Chapter: In the which, and the former, I (for the more delight of ſuch Captains and other Gentlemen, that love to practiſe *numerous*

rous forms and *Figures* of *Battell*, have fitted and ſtored them with *variety*; ſome for the *curious* and *quainter Souldier*; ſome for the *ſollid* and *experimented Souldier*; and ſome to direct the *unskilfull* and *ignorant Souldier*; that ſo either may come and feed according to his own fancy, and not be *cloyed* with a continuall intercourſe to one and the ſelf-ſame *diſh*. The *Command* and *Direction* for the firſt *Figure* followeth:

The Command is, *Two firſt and laſt ranks of Muſquettiers and Pikes, interchange ground.*

That done, *Muſquettiers move till you all ſtand clear of your Pikes.*

The Direction is, *Two firſt and laſt ranks of Pikes, face to the right and left-outward. Two firſt and laſt ranks of Muſquettiers, face to the right and left-inward.*

That done, *Interchange ground, and face as before.*

Laſtly, *Let the Muſquettiers of the Front, Reere, and Flanks, move to the Angles of the Pikes, and face all to the firſt-front.*

Front.

C

With larger numbers, where theſe are but two deep, make them 6. 8. or 10. deep. This is a very good form for the Muſquettiers with halfe-pikes.

M M M M M M M M M
M M M M M M M M M
S S
P P P P P P P P
P P P P P P P P
E
M M M M D P P P P P P P P D M M M M M
M M M M P P P P P P P P P M M M M M
M M M M P P P P P P P P P M M M M M
M M M M D P P P P P P P P D M M M M M
S P P P P P P P P S
P P P P P P P P
M M M M M M M M M
M M M M M M M M M

L

Reere.

In this *form*, the *Muſquettiers* may *give fire* to the *Front*, *Reere*, or *Flanks*; any way, or every way. If you *fire* to the *Front*, the *Muſquettiers* of the *Front-diviſion* having *fired* two or three times over, the two *diviſions* of *Pikes* on their *Angles* may *advance*, and *charge*, whileſt the *Muſquettiers* that laſt *fired*, *face to the right and left by diviſion, and place themſelves behind their Pikes*; the *Muſquettiers* of the *Flanks*, in the interim, *moving forwards*, and *firing* at diſcretion: The *Reſerve*, or *Reere-diviſion* of *Muſquets*, may in like manner be brought-up to *fire*, as you ſee fit; each *diviſion* may be *ſheltred* by their *Pikes*. From this take a ſecond *Figure*, with a little alteration. The *Command*, *Direction*, and *Figure*, followeth:

Two out-moſt files of each Flank of the Front-diviſion of Muſquets, move forward to the Angles of your own Diviſion.

Two out-moſt files of the Reer-diviſion of Muſquets, move to the Reer-angles of your own Diviſion of Muſquets.

By two out-moſt files, underſtand the two outermoſt files on each part, as well of Front and Reere, as Flanks. And although two deep cannot properly be tearmed a file; yet let it produce no Criticiſme, ſeeing it could not be avoided, conſidering my number.

Two

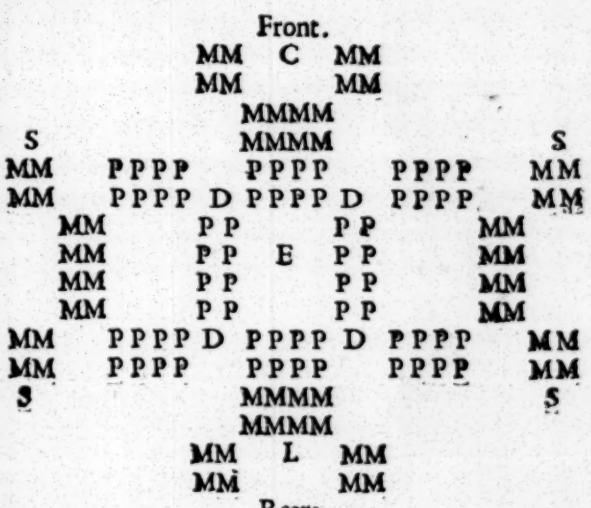
Two last Rankes, of the two outer-most files of the Flank-divisions of Musquets, face to the Reer; and move to the Reer-angles of your owne divisions.

Two first Ranks of the two out-most files (of the flanke-divisions) of Musquets: move forwards to the front-angles, of your own divisions.

Foure inmost files of the Battell of Pikes: face to the front and reere: (then) move to the Angles of your owne division of Pikes.

The whole Body face to the Front.

Front.



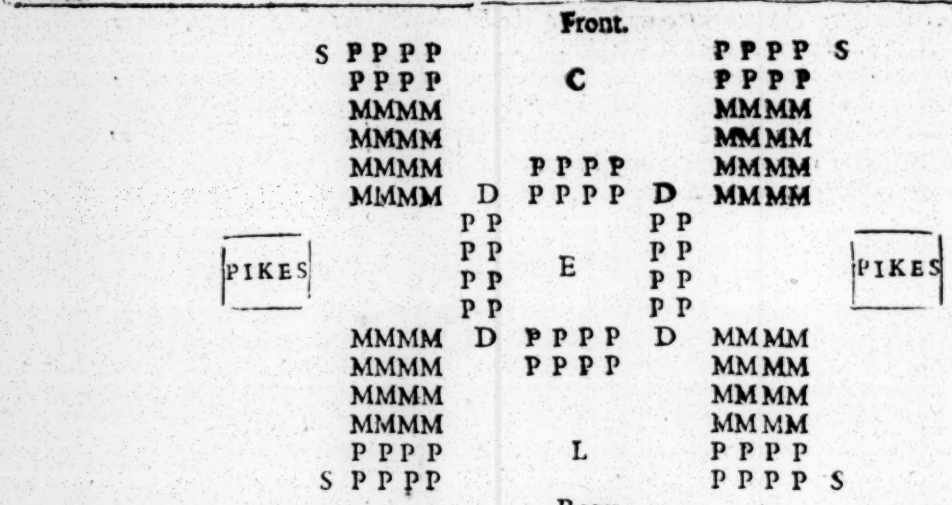
Reere.

This is a very good form for the Musquetiers with halfe-pikes.

Although this *Figure* be here demonstrated by such small *divisions* of men, let it not perplex the opinion of its worth, rather cast your eyes on the *severall divisions of each Armes*, and supervise their *orderly placing*. How *offensive* to the *enemie*, how *defensive to themselves*. To demonstrate the severall wayes of *firing* upon it, would prove as *tedious* as needlesse: Let it suffice that they may *fire, advance, retire, powre on their shot, and retreat behind their Pikes, inlarge their Intervals*, or *joyne into one grosse*, any of them, or all of them, at discretion. Come we now to a* *firing*, that shall produce another *Figure*. Let the *firing* be directed to the *Front* and *Reer*, and to that end command *halfe the Body to face about*; the out-most *files* of *Musquettiers* (which were advanced) begin the *firing*; doing their execution on the same ground (without moving forwards at all) by which meanes they become even in *Ranke* with the *Musquettiers* from whence they were drawn: and so *give fire* together, once or twice over.

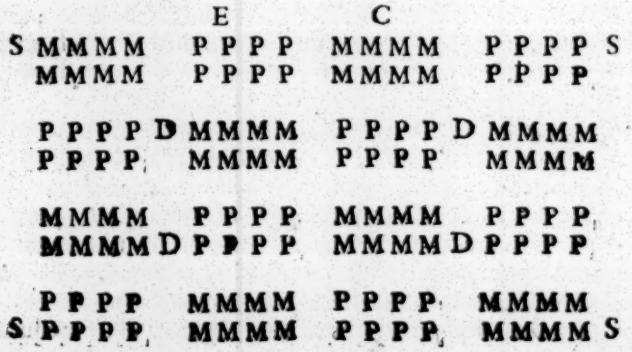
**A firing to produce another Figure.*

You are further to observe, that the *Divisions of Pikes* on the *wings*, are in the interim to advance (forwards) beyond the *Musquettiers*, there *charging their Pikes*; the *Musquettiers* then having *fired again*, are to *face to the right and left outward*, moving and placing themselves, behind the divisions of *Pikes*. The *Flanke-divisions* of *Musquettiers*, in the interim of the *Pikes charging*, are to *give fire* after the same manner, as the others did before them: and lastly, place themselves behind the *shot* that began the *firing*. The *Bodies* of *Pikes* in the midst of the *Battell* (if occasion be) may move forwards and *charge*: if they keepe their standing, and *face to the first-front*; this ensuing *Figure* will be produced, &c.



This *Figure* according as the *Musquettiers* ſtand now placed, is moſt fit for *firings* by *Extraduction*, but may by drawing forth of the *Musquettiers* be varied into ſeverall other *formes*, as the occaſion and diſcretion of the Commander ſhall thinke meet, as the *Quadruple Horne-Battell*, to *Front* and *Reere*, and many others. Nevertheleſſe, becauſe I would not be tedious, I will next forme the *Checker-battell*. * Therefore to that end, cauſe *the Pikes in the midſt to cloſe their diviſions.* (That done) *let the Battell of Pikes face to the right and left outward, and place themſelves even between the diviſions of Muſquettiers, and all face to the front.* This being done, the Body ſtands divided into two deepe *Hearſes*. Next command, *firſt foure Ranks (of each Hearſe) ſtand, the reſt by foure ranks in a diviſion, move forward, and range even with the front.* This being performed, your Body ſtands in a long *Checker-battell*, 4. deepe, and 32. a-breſt. If you will make them 8 deepe, with diviſions (foure of each Armes) checker-wiſe; Command one of the *flanks* to double the other by *diviſion*. If you pleaſe to make 16. diviſions *Checker-wiſe*, and 8. deep (which is the Figure now intended) command, *left-flanke, double the depth of your right-flanke intire*, the which produceth this following *Figure*.

* *The direction to make the Checker-Battel, either with 16. diviſions of each Armes, or with 8. diviſions.*

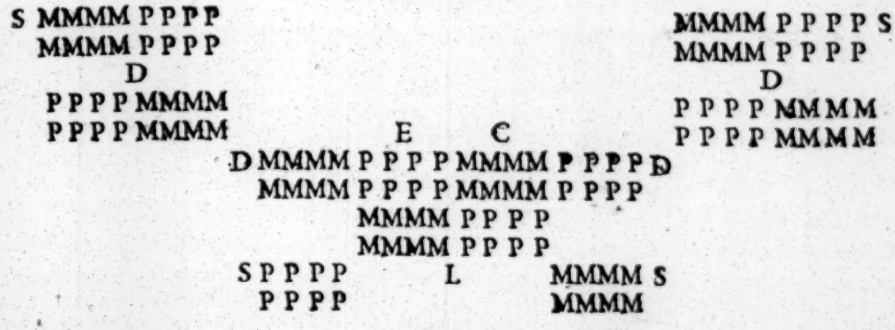


I ſhould

I should be much too tedious, should I enlarge my selfe upon the severall *Firings*, and *Figures* of *Battell*, that might be drawn from this *Checker Form*. I shall demonstrate one, and so draw towards a conclusion of this Chapter. For the which, command the * *Front-halfe of the Body to face to the right and left-outward*; (then) *move to the Angles of the standing part of the Body*: That being done, *Stand, and face to the Front again*: Next, command the *two Reer-angle-divisions, face-about, and move to the Angles of the standing part of the Reere*; (then) *face to the Front again*; and it produceth this following *Figure*.

* By front-halfe, is to be understood, that halfe of the Body next to the front.

From.



Reere.

Any ingenious *Souldier*, at first sight, may contrive severall wayes, and *Firings*, upon this *Figure*: And therefore, not to discourse what may be done, nor with what varieties to be done, I will come to the *Reducement*.

To which end, in the first place, *close your divisions* again into the *Checker-Battell*. *The reducement.*

2. Command the *Front-halfe of the Body, face to the right*, and *move* untill they are *cleare of the standing part*: then *face as before*.

3. Command the *foure out-most files, to the right of each division, stand*; the rest of the *Body, by foure files in a division, invert after the right divisions*. Now your *Body* stands in two *Hearse-Battels*: Let the *hinder-most* move forwards even-a-breast with the *fore-most*, keeping the *Intervall open* between them.

4. Command *all the Pikes, of both divisions, face-inward, and close their divisions.*

Lastly, command *Musquettiers and Pikes, both of Front and Reere, close their divisions to the Battell of Pikes*. This being done, and all *faced* to the *proper-Front*, they are perfectly *reduced*, as at first.

CHAP. CX.

How a Captain, or Superiour Commander, ought to be qualified: What is requisite to every common Souldier. The use of variety of Forms and Figures of Battell; with severall Regimentall Forms, that may be practised with a single Company, and the Reducement.

NExt after our *Prayers*, for blessings from above, *Policy* and *Stratagems* of *Warre* have been found most prevalent; as more *availing* than numerous *strength*: seldome failing, most time gaining the wreath of *Honour*. Yea, perhaps, by some meane and ordinary *wile*, the which being once known, growes despicable; as falling within the capacity of

Politick Stratagems have many times procured great victories.

of the meaneſt judgements. Of this, *holy Writ*, as well as *prophane Hiſtory*, is ſtored with ſufficient examples.

* *The Souldiers love to their Generall a matter very conſiderable.*

A ſecond *meanes*, conducing towards the *advance of victory*, is the * *love of our Generall, Captain, or Commander*; a *Jem* more prizable and eſtimate, then the beſt *Armours of proofe*; as being of ſuch force with the *Souldier*, that hee will never *ſhunne danger*, nor refuſe to hazzard the greateſt difficulties; (the further) thereby to *ingratiate* himſelfe into the favour of his *worthy Chiefetain*, whom for his *vertues* hee *really affecteth*. For the attaining or gaining this *love of the Souldiers*, it were neceſſary, in the firſt place, that ſuch *Commanders* were known to be *wel-qualified with skill*, having good [a] *experience* of the *Warres*: for the *Souldiers* will not eaſily flinch or fly from ſuch a *Commander*, whoſe *wiſdome, skill*, and *experience*, they are wel-aſſured of. Secondly, the [b] *Valour* of our *Chiefetain* is not of leaſt *importance* to confirme the minds of the *multitude*: for the *courage* and *skill* of the *Commanders* makes even a *cowardly people hardy*: the want thereof, works the contrary effects. Thirdly, [c] *Juſtice*; for that *Captain* which with equity and juſtice can rule his *Souldiers*, neither ſuffering them to doe injury to others, nor receive wrong to themſelves, ſhall gain the love of his *Souldiers*, and fear of his *Enemies*. Fourthly, [d] *Temperance*: and fifthly, [e] *Liberality*. Theſe together, build-up a man fit for the imployment of his *Prince and Countrey*. But whither am I ſoaring? let me check my flight, and return to the common Souldier.

[a] *Experimented skil.*

[b] *Valour.*

[c] *Juſtice.*

[d] *Temperance, and* [e] *Liberality.*

"*Xenophon* declareth, that ſuch *Souldiers* as ſerve *God*, and are obedient to their *Cap-*
"*taines*, may boldly and couragiouſly fight with their *Enemies*, not doubting victory. Adde theſe three other pertinent neceſſaries to every *Souldier*: Firſt, to [f] *harden the body*, that ſo it might be *inured*, and made *capable to endure paines, want, and travell*, with patience. Secondly, to *handle our Armes with facility and ſafety*. Thirdly, to learn to keep our *orders*, in *martching, encamping*, and *fighting*: The which, as it cannot alwayes be in one and the ſelf-ſame *forme*; neither ought the *Armes* to be alwayes placed after one and the ſame manner; but be varied according to the occaſion, and the wiſe fore-ſight of the *politick Commander*. Therefore whoſoever would be perfect in this part of the *Art military*, muſt often accuſtome [g] himſelfe to the contriving and *drawing-forth* of many and ſeverall *forms* of *Battell*, conſulting their ſeverall *uſes*: As ſome againſt *Horſe*, others againſt *Foot*; ſome againſt *Horſe and Foot*: ſome for *Straits*, ſome for *Campania*, ſome for *Hilly and Mountainous places*, other for *valleys and watry places*; ſome for *boggy and rotten ground*, ſome for *woody and buſhy grounds*; ſome for *night*, and ſome for *day*. Theſe notwithſtanding, *time, number*, and *place*, will thruſt-in *accidents*, and often cauſe alteration of the moſt ſetled and ſelected *form*. Nevertheleſſe, the *Captain* thus ſorted for all occaſions (*like the skilfull Chirurgion, having ſalves for every ſore*) may with more *boldneſſe* addreſſe himſelfe to ſuch enterpriſes, as by *command*, or *chance*, ſhall be caſt upon him.

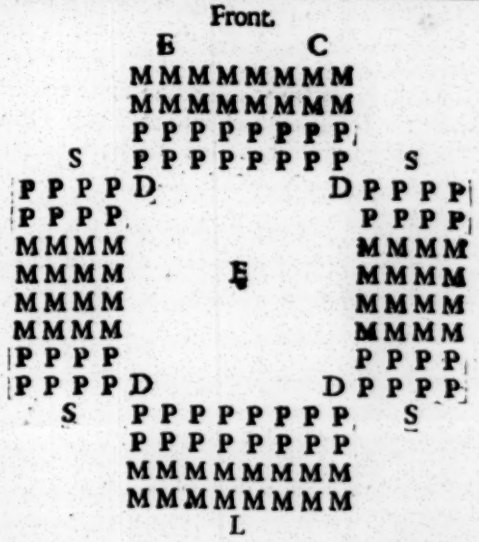
[f] *Souldiers ſhould inure their bodies to hardſhip. Hannibal effeminated his Souldiers by once wintering them in Capua.*

[g] *Excellent Commanders doe often accuſtom themſelves to contrive and imbattell ſeverall forms.*

Theſe conſiderations promp me to proceed; queſtioning the length of my diſcourſe, that hath ſo long detained you from the *Figures* of this Chapter. The which that I may timely remedy, take the [h] *Command* and *Direction* for this following *Figure*. Command the *Muſquettiers of the two firſt and laſt ranks face-inward*, the *Pikes of the ſame ranks face-outward, and interchange ground with the Muſquettiers*. Secondly, Command the *Reere-halfe of the* 8. *inner-moſt files face-about*: That done, Laſtly, let the 8. *files, ſo faced to the Front and Reere, move to the inner-moſt Front and Reere-angles, then ſtand, and face all to the proper-Front*; by which this *Figure* is produced.

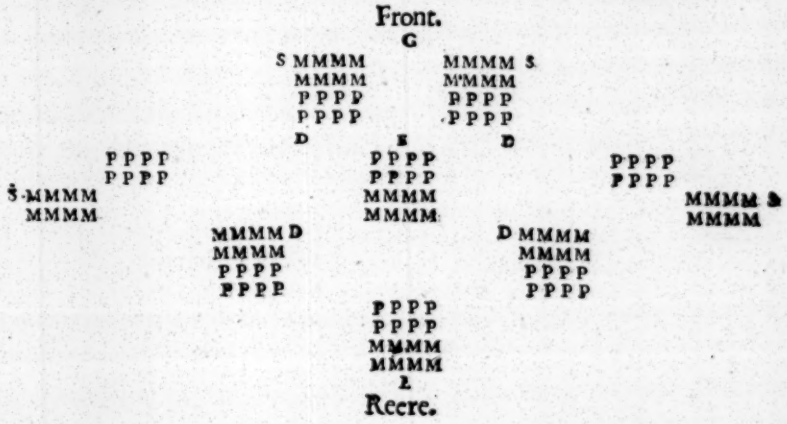
[h] *The Command and Direction to make the following Figure.*

Front.



The Musquettiers of the flanke divisions, may bee drawn forth cleer of their Pikes, and fire any way according to direction, or they may give fire by extradiction.

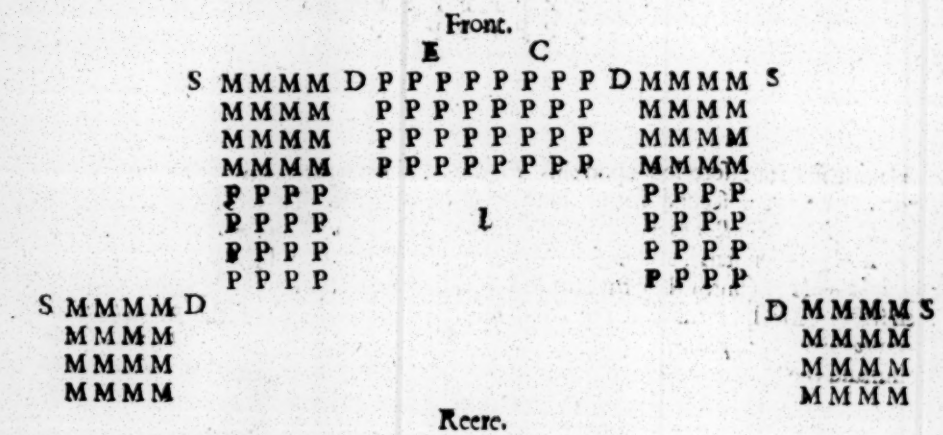
Having *fired* at discretion upon this *Figure*, and brought them againe into the same *Order*. Observe a second forme drawne from the first. To make the which, Command the *first foure Ranks of the flanke divisions face outward, and move cleere of the last foure Ranks*: then stand, and *face as before*. Secondly, command the *front-division open to the right, and left* (untill they have made a *sufficient Intervall* to receive another *division*;) then stand. Thirdly, command the *left-flanke*, (or *halfe-ranks*) of the *Reer-division advance forwards and place themselves behind the Intervall, of the Front-divisions*. Lastly, Command the *Musquettiers, on the outer-most divisions, face outward, and move cleer of their Pikes*. These Commands *duely executed*, renders this following *Figure*.



This

This *Figure* ſtands very apt for *fight*, each *Armes* being ſo placed, that they may be ayding and aſſiſting to the other. The *Diviſions*, *Maniples*, or *Battels* are ſo orderly contrived, that they may *advance*, *retreat*, or *releave* one another, without any let, impediment, or incumbrance. When you have *given fire* at diſcretion upon this *Figure*, if you would come to a *Reducement*, Cloſe the *Diviſions* back into their places from whence you drew them; and cauſe the *Pikes* of the two firſt and laſt *Ranks*, to interchange ground againe with the *Muſquettiers*. This done, all is *reduced* as at firſt. But before we come to the concluſion of this Chapter, proceed we to ſome other *formes*, to ſatisfie the deſirous. The *Commands*, *Directions*, and *Figure* follow. * *Halfe-files* (of each Armes) *Face to the right and left outward, and move* (untill the *Pikes* ſtand right) *after the Muſquettiers of the Front-halfe-files* (then) *ſtand and face as before.* Secondly, command *halfe-files of Muſquettiers face-about, and move downe, even with the Reer-angles of Pikes*, then *ſtand and face to the front.* By the execution of theſe Commands, this *Figure* is produced from the ordinary ſquare of *Pikes* flanked with *Muſquettiers*.

The direction to make the following Figure.

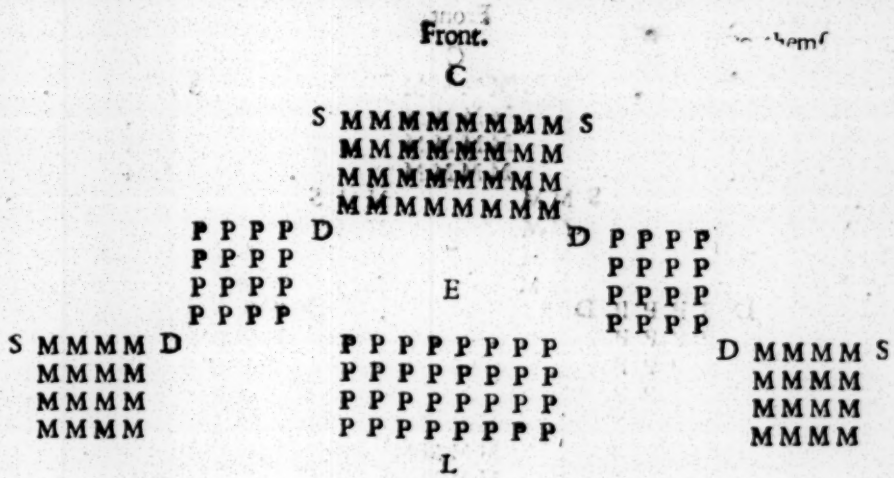


This *Figure* at firſt ſight, ſhewes want of reſerves in the *Reere*: the which muſt be ſupplied either by *number*, by *nature*, by *art*. If number be wanting, the * *Naturall ſcituation* of the place affording either *Ditch*, *Wood*, or *River*, may ſuffice as a *reaſonable defence*. If *number* and *nature* be both niggardly in their aſſiſtance: then let *Art* ſupply the defect, by *impalling the Reer*, with the *Wagons*, *Carts*, and *Baggage* of the *Army*. Having *given fire* on this *figure*, as you may ſeverall wayes, ſometimes placing the *Muſquettiers* in the *Reer* of their owne diviſions; and ſometimes in the *Reere* of the *Pikes*: The *Pikes* in the mean time ſometimes *porting*, ſometimes *charging*, ſometimes *advancing* forwards, and ſometimes *retreating*. From this take another *Figure*, the which is thus to be made: *Face the whole Body about*, and command the *Muſquettiers* (the which then are in the * *Front*) *to cloſe their diviſions.* Laſtly, Cauſe the *two Reer-diviſions of Muſquettiers, face to the right and left outward, and move cleer of the Pikes*, the which ſtood before them, (this done,) peruſe the *Figure*.

**Naturall ſcituation availes much for the defence of a Battell.*

** This facing-about hath made the reere the front.*

Front



When you *give fire* on this *Figure*, the *Muſquettiers* of the *Front-diviſion* are to *wheel-off* to the *right and left*: Nevertheleſſe, if you would have them *wheele* all *off* to the *right*, then open the *Muſquettiers* in the *midſt*, and make them an *Intervall*. Having practiſed and tried your *Souldiers* ſufficiently on this *Figure*, wee will come to another: but firſt, * *face your Body about again after their proper File-leaders*. Secondly, Command the *Front-diviſion of Pikes*, *face to the right and left*, then *move*, and place themſelves *before the two other diviſions of Pikes*. Thirdly, Command the *two Front-diviſions of Muſquettiers move forwards, untill their Reere be even with the Front of Pikes*; then, *face inwards, cloſe their diviſions, and face to the Front*. This produceth a *hollow Square*, the *Muſquettiers* being in the *Front and Reere-diviſions*, the *Pikes* on the *Flank-diviſions*. I forbeare the *Figure*, being the ſame with that in Chapter 103. Proceed wee to our next *Figure*; to make the which, firſt Command,

* *The Body re-faced about after the proper file-leaders.*

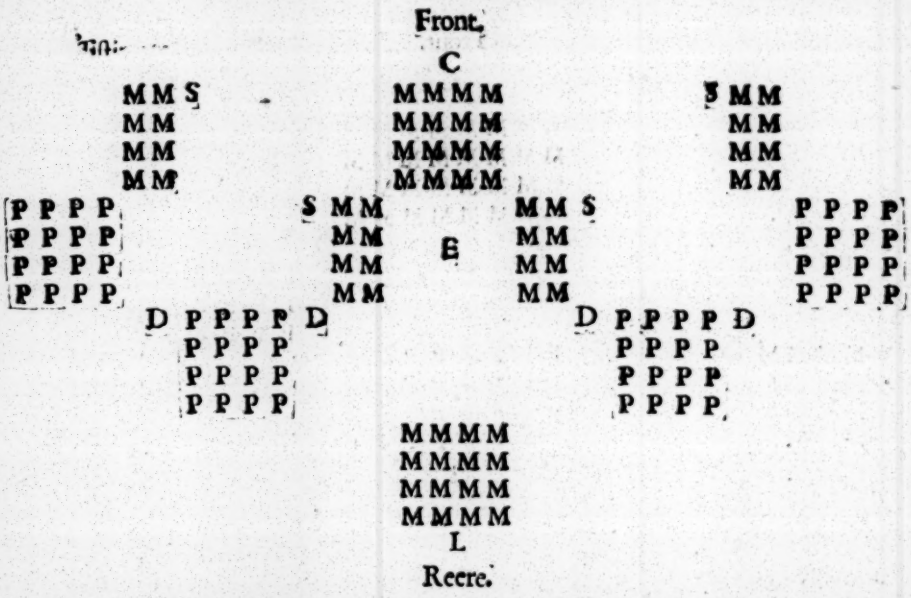
Two out-moſt files (of each Flank) of the Front-diviſions of Muſquettiers, face to the right and left; then, *move to the out-moſt Angles of your Pikes*.

The direction to make this following Figure.

Secondly, Command the *two out-moſt files of each Flank of the Reer-diviſion of Muſquettiers, ſleeve-up on the in-ſide of the Front-diviſion of Pikes*.

Thirdly, Cauſe the *Front-halfe-files, of each diviſion of Pikes, face-outward, and move to the out-moſt Angles of your Wings of ſhot. Face all to the Front*.

Front.



It were needleſſe to tell you, that this *Figure* is moſt eſpecially uſefull for *Firings* in *Front*: Nevertheleſſe, it may in like manner very fitly ſerve for *Firings* in the *Reer*, provided, that you *face them about*, and then *move forwards your ſmall diviſions of Muſquettiers into the Front*: By which means, in like manner, it might be made a ſerviceable *Firing*. But not deſiring to be tedious, I will come to the *Reducement*, and ſo conclude this Chapter. First, Command the *two out-moſt files (or wings) of Muſquettiers face-inward, and cloſe their diviſions*. Secondly, Cauſe the *Muſquettiers in the Reere to move forwards into the Intervall ſtraight before them*. Thirdly, Command the *outer-moſt diviſions of Pikes face-inward, and cloſe before the Reere-diviſions of Pikes*: then, *face as before, move forwards, and even the Front of Muſquettiers*. (This done, your *Muſquets* are all in the *midſt*, the *Pikes* on the *Flanks*.) Laſtly, Command, *Muſquettiers and Pikes, interchange ground*. This brings all into the firſt order.

The Reducement.

CHAP. CXI.

Of the Muſquet and halfe-pike, with the ſeverall wayes that have been tried to make the Muſquettier defenſible againſt the Horſe. As alſo, tenne Queries objected, to the Halfe-pike and Muſquet.

WHen I firſt began this Edition, I had not the leaſt intent to ſpeak any thing of the uſe of the *Halfe-pike* and *Muſquet*, but have wholly reſerved it untill another time; yet at the importunity of ſome of my familiar friends, though it were late, yet they were not willing it ſhould be left out. Nevertheleſſe, when I conſidered that it had been the unhappy fate, even of the *greateſt* and *beſt inventions*, to be embaſed and vilified; yea, and to be accounted of but as idle fancies or dreames, before they were publiſhed; and being once made known, ſuffering too much embaſement, as being often under-valued, and accounted of but as a thing that every one could have well performed. And hereof I

might demonſtrate many examples. Wherefore, if the * *paſſion* of *Envie* have in it any thing *allowable* and *naturall*, as having *anger*, *fear*, and other like *affections*, it is in ſome ſuch caſe as this; and ſerveth againſt thoſe which would uſurp, and take to themſelves the *knowledge* and *invention* wherewith *God* hath denied to indue them. * Rawleigh Hiſt. mundi.

Therefore, were it not for the common good, and the great affection that every one ought to beare to his Countrey, it would appeare more commendable in wiſe men to conceale their ſtudies, making their *funerals* in their own *boſomes* (whence they had their firſt *births*) rather then to expoſe them to the publike, where *vertuous ſtudies are too often cruciated* by the *darts of envie*, which *malignant ſpirits too frequently poure upon them*. Notwithſtanding, I will not altogether diſcourage my ſelfe, although I know by ſufficient triall, that *Cynnicks will bark at thoſe they know not*; and *others, of as bad a nature, will accompany their clamours*: For ſo it is with the inconſiderate multitude, who wanting that *vertue* which wee call *honeſty*, and that *ſpeciall grace* which wee call *charity*, *condemne* without *hearing*, and *wound* without any *offence given*. This I can ſpeak, with *pitty* to my ſelfe, as having too frequent and familiar *experience* thereof. But of theſe *Natures*, that *lie as it were in* * *ambuſh, to carp and find fault*, endeavouring to wreſt *good intentions* to their *evill conſtructions*; ſeeing the *Wiſe-man* complained of ſuch long ſince, and that *Nature* hath not been wanting to thruſt-off the ſame *brood* daily into the World, as bad, and perhaps more malicious; I will leave them to their eaſie wayes of reprehenſion, then which there is nothing of more facility, and return to the work of this Chapter. * Eccleſ. 11. 31.

Having often conſidered with my ſelfe the danger of the *Muſquettier*, and how unable hee is to *reſiſt the Horſe*, after hee hath *poured forth his ſhot*, without hee be *ſheltered* either by ſome *naturall* or *artificiall defence*; and withall having knowledge, that in ſeverall parts of *Chriſtendome* divers *Captains and Souldiers* have oft been trying concluſions, to make the *Muſquettiers* as well *defenſive* as *offenſive*; ſome by *unſcrewing the heads of their Reſts, and then ſcrewing the ſtaffe of their Reſts into the muzzel of the Muſquet*, with the *arming of a Pike at the lower-end*; by which means, they would uſe the *Muſquet* and *Reſt* together, in the nature of a whole *Pike*. But this proved ſo tedious and troubleſome, that it fell without profit. Another ſort had made *Reſts*, with the one end of the *fork* (or *head*) being like a *ſpike*, about 18. inches in length: This alſo proved extreame troubleſome to themſelves, *dangerous* to their *fellowes*, and of no *validity* againſt the *Enemy*. A third ſort had *halfe-pikes* of about 7. or 8. foot in length, uſing it after the manner of a *Reſt*; but all the while the *Muſquettier* was *charging* (his *Muſquet*) one of them was enough to trouble a *whole file* beſides the danger in the *recovery*. A fourth ſort there was (yet better then the former) that with a *hook was faſtned to the girdle, the while the Muſquettier was making ready*; but this had his defects alſo, as being both *tedious* and *troubleſome*. Many other wayes and concluſions have alſo been tried, with ſucceſſe like the former, which I forbeare to demonſtrate; for as their conceits proved uſeleſſe, ſo the diſcourſe would prove as fruitleſſe. Laſtly, my *ſelfe*, with another * *Gentleman* of *our ground*, (both wel-affecting the uſe of the *Muſquet*) found out a way to uſe the *Halfe-pike* and *Muſquet*, with ſo much *facility* and *eaſe*, that it is *farre leſſe troubleſome than the Reſt*; and yet of a *greater length* than any of the former *Reſts*, or *Halfe-pikes*; as being compleat 10. foot in *length*, with the *arming*. * Mr. John Davies of Black-friers.

All the former *devices*, if they could have been brought to any *maturity*, yet would have falne farre ſhort of this, for the *triple uſe thereof*: As being a *Reſt*, if there be no further occaſion: As being a * *Palliſado* (if there be occaſion) to *defend the Muſquettier from the Horſe*: As being a *Half-pike to uſe in Trenches*; as alſo when our *ſhot* have *poured out a feather* * Or ſwelling great

great volly or ſhower of *Lead* on the adverſe *Muſquettiers*, they may then *nimbly* with their *halfe-pikes fall in amongſt them*. And laſtly, for the *purſuit* of an *enemy*, it being of all others the *beſt weapon*.

* *Muſquettiers with halfe-pikes fitteſt for to be ſent in parties.*

If a *party* of *Muſquettiers* were to be ſent out, thoſe uſing the *halfe-pike* of all others are the fitteſt, for that they are able to *offend their enemies*, and beſt able to *defend* themſelves. If after they have *given fire*, they ſhould be *overtaken* before they have *made ready again*, and *charged by the Horſe*; Yet they are able to defend themſelves with their *halfe-pikes*, even in the time they are *charging*: for the *front-half-files* may couch with their *halfe-pikes charged breſt-high, and ſwords drawne to keepe off the Horſe*, whilſt the *Reer-halfe-files give fire* over them, whereby they will bee ſufficiently able to *defend* themſelves, and *annoy their enemies*. In a word, the *halfe-pike* and *Muſquet* for them that know how to manage it, is of ſo *excellent uſe*, that the worth thereof cannot, nor ought not to be confined to the poore demonſtration of an unskillfull Writer, that will not take the liberty of a Hen to keckle over her owne egge: but leave it to the wide world to vindicate its owne reputation. Therfore now let us come ſomewhat neerer, and examine *what queries* or *objections*, have been made againſt it, and you ſhall find theſe *tenne* following, *viz.*

1. *If Muſquettiers with half-pikes be to encounter againſt Pikemen and Muſquettiers with Reſts (ſeeing there hath been no triall) whether Armes in reaſon would have the advantage.*

2. *Whether the Muſquet and halfe-pike be as ſerviceable againſt Horſe, as the Muſquettier with the Reſt and whole Pikes.*

3. *Whether the Muſquet and Halfe-pike, can as conveniently be uſed in all reſpects as the Muſquet and Reſt.*

4. *Whether the Muſquet and Halfe-pike bee uſefull in Trenches and Fortifications.*

5. *Whether the Muſquets with Half-pikes can be uſed in woods, where ambuſhments are uſuall laid, if not, where thoſe halfe-pikes are to be beſtowed.*

6. *Whether the charge wherein the halfe-pike exceeds the Reſt, will be countervailed by the ſervices it hath beyond the Reſt.*

7. *Whether in Company, or Regiment, it be convenient and neceſſary, to have whole Pikes, or no.*

8. *Whether Palliſadoes or ſwines-feathers, be not as ſerviceable againſt the Horſe, as the Halfe-pike.*

9. *Whether if all theſe queries and objections have a ſatisfactory anſwer, it be neceſſary or convenient, that the uſe of the Half-pike and Muſquet be knowne, before we have publique occaſion for ſervice.*

10. *Whether the weight of Halfe-pike, by which it exceedeth the Reſt, be not more troubleſome counter-poiſing all the benefits it hath before the Reſt.*

Theſe *Queries* have been urged by men not of the meaneſt *Ranke*, nor *skill*, but even of ſuch whoſe *opinions* were very *conſiderable*, and whoſe *judgements* could not *eaſily be miſled*, unto which they received ſuch ſatisfactory anſwers, as you may further peruſe in the Chapter following.

CHAP. CXII.

The tenne Queries objected to the Muſquet and halfe-pike fully anſwered. The Halfe-pike joyned with the Muſquet approved to be very uſefull, as having received approbation from divers Souldiers of great Ranke and quality.

HAving in the laſt Chapter ſhewed the queries objected to the *Halfe-pikes* and *Muſquet*; Come we now without preamble, to give an anſwer to each of them ſucceſſiv

ly. To the firſt wee ſay, That * *Muſquettiers* with *halfe-pikes* have the oddes, againſt *Muſquettiers with Reſts* and *whole Pikes*, for theſe and ſuch like reaſons; for preſuppoſe what number you pleaſe, the one halfe *whole Pikes*, *the other halfe Muſquettiers and Reſts.* The *fight* being begun at *diſtance* (as muſt needs be conceived) the *halfe-pike-men poure on a great deale more ſhot, at leaſt three to one*: by which meanes the adverſe part muſt needs be *broken and ſpoiled*, before they can poſſibly come up to the *puſh of pike*. Secondly, they that eſcape death and wounds, if their hearts ſerve them to come up to the *puſh*, will be ſo *weary*, *wind-leſſe*, and out of *order*, with their *haſt*, that they will not be able to ſtand againſt their Adverſaries, who *keeping their ground*, will neither be *weary nor out of order*. Thirdly, the *Muſquettiers* that come up *a-breſt* even with their *Pikes*, will with them be ſufferers of the like inconveniences; and now being come to *cloſe fight*, are not poſſibly able with their *Reſts*, to withſtand the better armed *halfe-pike-man*. Fourthly, if there were any reaſonable proportion of *whole Pikes joyned* with the *half-pikes* and *Muſquets*; the advantage then would be unqueſtionable.

*To the first.

To the ſecond we ſay, That *Muſquettiers with halfe-pikes, in ſtead of Reſts*, are more *ſerviceable againſt horſe, then whole Pikes and Muſquettiers with Reſts*, for theſe reaſons: Firſt, *Whole Pikes alone are too weake*, becauſe the *Horſe-man* carries *fiery weapons*, and can *kill the Pike-man at diſtance*, they neither being able to *defend* themſelves, nor *offend* their *enemies*. Secondly, *Muſquettiers with Reſts*, are not able in open *Campania*, to withſtand the *able and reſolute Horſe-men*, which will *break* them through and through. Thirdly, Both conjoyned in one *body* are too *weake* in *open*, and *even Countries* to withſtand the *Horſe*: for if your *Pikes* bee *flanked* with *Muſquettiers* (according to the uſuall manner) then the *Horſe-men kill the Pikes* at diſtance (as aforeſaid) and *rout* and *plunder the Muſquettiers on the flanks*, they having little poſſibility of aide from their *Pike-men*, when the *Horſe* are entred *pell-mell* amongſt the *Muſquetiers*, *knocking* and treading them downe. Fourthly, If they draw into any other forme of *impalment*, then one armes becomes a trouble to the other, neither being able to performe their due *execution*. Fifthly, *Muſquettiers* with *Halfe-pikes*, are able in any *forme* or *figure* of Battell, to defend themſelves from being broken by the *Horſe*, and by ſo much as their *firie weapon* doth exceed the *Horſe-mans in execution*; by ſo much they will be too ſtrong for him in the *open field*: and farre more in a *ſtraight* or place of *advantage*; where either *Nature* or *Art* hath ſecured the *flankes*.

To the third we ſay, That the *Half-pike joyned with the Muſquet*, may as conveniently in all reſpects be uſed for **eaſe*, and indeed is more accommodable then the *Reſt*, being more *expedite* for *execution*, and farre more ſafe for *defence*.

**The Reſt was deviſed onely for to eaſe men when the Muſquets were of 18. or 20. l. weight: But now the Muſquets are made lighter (as not exceeding 10 l. or 10. l. and ½ in the Magazines) the Reſt is of ſmall uſe: therefore no marvaile the Souldiers threw them away. But the Halfe-pike is an offenſive weapon, yea ſo far exceeding the Reſt, that it is many waies more ſerviceable then the ſword it ſelfe, both for offence and defence.*

To the fourth we ſay, That the *Reſt* is of no uſe in *Trenches* and *Fortifications*, where men preſent upon a *breſt-worke* or *parapet*: the *halfe-pike* in ſuch caſes may be *uſefull*; as when it happens they come to *cloſe fight*, where it proves advantagious.

To the fift we ſay, Neither *Reſts* nor *Halfe-pikes* are neceſſary or uſefull for the *Muſquettier* to *carry* in *woods and thickets*: whether it be to lay *ambuſhments*, or to the contrary to *ſearch them out*, and *beat them off*. Yet in ſuch caſes they are farre more uſefull then *whole Pikes*, being more eaſily mannaged. Nevertheleſſe if it be in great *timber-woods and forreſts*, there the *halfe-pike* may prove *uſefull* and *portable*. But if it ſhall be found inconvenient for ſuch *ſervice*, then they are to be diſpoſed in the *Carts*, and *Wagons*, of *Ammunition* or elſe-where, as opportunity ſhall be offered.

To the ſixth we ſay, That the ſervice conſidered of the *Halfe-pike*, the charge of it above the *Reſt*, is not conſiderable: for a *ſerviceable Halfe-pike* may be had for 2. s. 6. d. which exceeds not much the price of a *Reſt*. Further, when it ſhall appeare, that the *Halfe-pike* and *Muſquet* will prove more advantagious to our Nation, in caſe of invaſion, then it can be to any Enemy invading; then it may be preſumed, were the charge farre greater then it is, yet it ought not to be neglected.

To the ſeventh we ſay, That *whole Pikes* by no meanes are to be left, or neglected; becauſe, for ſome ſervices they are eſpecially uſefull: notwithſtanding $\frac{1}{3}$ or $\frac{1}{4}$ part at the moſt is ſufficient, either for *Company*, or *Regiment*; for the *Muſquettiers* are eaſily transferred into *Pike-men*, by changing of their Armes when occaſion requireth, but the *Pike-man* cannot ſo ſoone, nor ſo eaſily be made a *Muſquettier*, when the ſuddenneſſe of the occaſion, or the quality of the Warres ſhall require it.

To the eighth we ſay, That *Halfe-pikes* are equally uſefull and ſerviceable againſt the Horſe, as the *Palliſado*, when in the ſame kind they are uſed, *viz.* being ſtrucke or faſtned into the ground; and hath theſe * advantages above the *Palliſado*. Firſt, the *Palliſado* is alwayes troubleſome to the *Muſquettier* in the carrying, being never helpfull in the *Martch*: But the *Halfe-pike*, like the *Reſt*, (and better) affordeth much eaſe to him that carrieth it, without trouble. Secondly, the *Muſquettier*, while hee carrieth his *Palliſado* in his hand, cannot *give fire* upon occaſion; but the *Halfe-pike* is then as *uſefull* as the *Reſt*. Thirdly, there can no uſe be made of the *Palliſado* againſt *Foot*: but the *Halfe-pike* is then a ſerviceable weapon; and indeed is not onely *Halfe-pike*, but alſo hath all the accommodations both of *Reſt* and *Palliſado*.

* *The Halfe-pike may be ſooner grounded than the Palliſado.*

To the ninth wee ſay, Becauſe *England* is ill-furniſhed with Horſe, the benefit of the *Halfe-pike*, in defending the Charge of invading Horſe, is more neceſſary for us to embrace, than for others; and therefore it ought by us generally to be practiſed.

To the tenth we ſay, That which hath been already delivered, and continuall practice will make manifeſt, Firſt, that the weight the *Halfe-pike* hath above the *Reſt* is *doubly recompenſed* by other benefits. Secondly, Experience makes it appeare, that the weight, though it be more then of the *Reſt*, yet it is no way more troubleſome.

Let me adde one benefit more of the *Halfe-pike*, although it concerne none of the Queries: The *Muſquettier*, whether hee uſe *Reſt* or *halfe-pike*, can doe no *execution* at any great diſtance, if he want *powder*, *match*, or *bullet*, the which often are in the one or other found defective; then the *Halfe-pike* is uſefull. Secondly, grant the *Muſquettiers* to be wel-accommodated with fix *Armes*, and wel-fitted with good *powder*, *match*, and *bullet*, yet ſometimes the extremity of weather, even in the joyning of the *Battell*, may make the fiery weapon of no uſe, by exceſſe of haile, ſnow, rain, or the like: but then ſhall the *Halfe-pike* have great advantage above the *Reſts*, it then being a ſerviceable weapon, either offenſive or defenſive.

Now although this might ſuffice to give ſatisfaction to any rationall men, yet beſides this, it hath had the *approbation* of many of the better ſort of *Souldiers*, that have ſeen the uſe thereof: as Sir *Thomas Glenham* Colonell, a Gentleman of as ſerene a judgement, and as great a lover of *Armes*, as any I know in the *whole Kingdome*; as alſo Lievtenant Colonel *Chamberlain*, an approved *Souldier* in moſt of the *German* Warres, the which have been in our time; who took ſuch an eſpeciall liking to it, that hee cauſed a *Swediſh youth* that attended him, to learn the *uſe thereof*, and two of his *Sorjeants*. Many others, both of skill and quality, that have ſeen it practiſed, have alſo given their approbation unto it. But I would not be tedious; therefore take this one for all, the which may ſerve to ſtop the mouths of the moſt malicious; it is a Letter ſent by the Lord Viſcount WIMBALDON,

DON, *to the Preſident, and Gentlemen of the Artillery Garden, London,* the third of *March,* 1637. The Copy of which Letter I have inſerted *verbatim,* as followeth.

The uſe of the Halfe-pike and Muſquet together.

WHereas the *Halfe-pike* and *Muſquet* being practiſed by ſome *Gentlemen* uſing *Armes* in the *Artillery Garden,* which are *Armes* both *offenſive* and *defenſive,* and, after conſideration of them, being deſired to give my opinion of their uſefulneſſe; Theſe are to certifie, that having well conſidered of the uſefulneſſe of the Invention, my judgement is, that *theſe Armes may prove very ſerviceable, and advantagious to the defence of the Kingdome; and therefore I hold it fit that they ſhould be practiſed,* for theſe Reaſons following:

Firſt, That in regard that the greateſt danger of this Kingdome doth conſiſt in being ſurpriſed, and that there is nothing can defend *a Landing-place better,* then *Horſe* with *Muſquettiers* behind them; So I hold the *Halfe-pike* the more ſerviceable, for that the *Horſe* ſhall carry both *offence* and *defence* by thoſe *Armes,* and in farre ſhorter time come to the *Landing-place,* then any *Foot*; the *Horſe marching* further in a day, then the *Foot* in three.

Secondly, They are better then *ſingle Muſquettiers to force a Quarter,* being mounted-up behind *Horſe-men.*

Thirdly, They are good in *Trenches*; for they will be able to defend themſelves with their *Halfe-pikes,* after they have *diſcharged* their *Muſquets*; for want of which, the *ſingle Muſquettier* is forced to retire, to a great confuſion, and hindring thoſe that are behind them.

Fourthly, And above all things in *Skirmiſhes,* when no *Pikes* are able to defend them, they are able to defend themſelves; and when they doe retire, as ordinarily they doe behind the *Reere* of the *Pikes,* being forced by a ſtronger *Enemy,* they are able to *gall the Enemy* upon the *Flanks,* and doe great ſervice without danger.

Fifthly, In *narrow ſtraits and paſſages,* they can *defend* and *offend* more then any *Pikes* or *Muſquettiers*; for where *Pikes* and *Muſquettiers* cannot ſerve, they will doe double ſervice with ſingle Bodies.

For theſe and ſome other Reaſons, I approve of the exerciſe of them in your ſeverall meetings; and doe think it fit, *that all ſuch Practitioners of theſe Armes* (which I could wiſh were more) *be not interrupted nor hindred in the uſe of them, but may receive good incouragements, for the better proſecution and finding out the compleat uſe and perfection of them:* And that the *Captain* and other *Commanders* of the *Company,* at their ſeverall times of *exerciſing, conſtantly put in practice the ſaid Armes*; which I doubt not but will be found very advantagious to his Majeſties ſervice.

Cecill houſe, Martii 3. 1637. WIMBALDON.

CHAP. CXIII.

Of the Halfe-pike, how it may be ſerviceable on all forms: with ſeverall Figures, indifferently uſefull to Halfe-pike or Reſt.

THe *Muſquet and Halfe-pike,* having thus vindicated its reputation, it were needleſſe to ſpeak further to it; although much more might be ſaid to good purpoſe, in the further *approbation* thereof. Nevertheleſſe, being that as yet it hath not been ſeen by his Majeſty, and his Councell of Warre; and till then it can receive no generall allowance; the

uſe thereof for the preſent, being onely for voluntary Companies, and ſuch other Gentlemen, that practiſe the experiment for the good of the Kingdome; Therefore I muſt entreat my loving friends at preſent to accept of the *Poſtures* of the *Muſquet* and *Half-pike*; and hold me excuſed that I doe not inlarge my ſelfe in diſcourſing the *motions*, *formes*, and *figures* moſt proper to that weapon: Seeing I hope before it be long the uſe thereof being perceived, will be enjoyned by authority, and then God willing, I will write ſomething for the *Muſquet* and *Halfe-pike* by it ſelfe. And now we will proceed to the *Poſtures* ſuppoſing our *Muſquettiers* to come ready *charged* and *ſhouldered* into the *field*, and from thence make the entrance upon our *Poſtures* of the *Muſquet* and *Half-pike*.

The *Carriage* of the *Halfe-pike* upon a *march*, may be uſefull theſe four ſeverall waies.

Viz. The *Muſquets* being ſhouldered, the *Halfe-pikes*, *Advanced.* *Ordered.* *Comported.* *Trailed.*

1. *A full Body of Muſquettiers martching with Halfe-pikes advanced, is glorious to behold to our friends: Terrible to be ſeene of our enemies.*
2. *Martching with Halfe-pikes ordered, is no other but as a ſtaffe to eaſe you in your martch; or as you uſe the Reſt martching in the right-hand.*
3. *Comporting your Halfe-pikes martching, is to be underſtood, when you martch under Trees, or ſome ſuch place where they cannot be ordered or advanced.*
4. *Treyling your Halfe-pikes is at ſuch time as you martch thorow low woods, and thickets, when the Halfe-pikes can neither be advanced, ordered, nor comported.*

Being come to the place where you meane to ſhew the *poſtures* and *motions* of the *Muſquet*, joyned with the *Halfe-pike*. Firſt, take the *halfe-pike* into the *left-hand* with the *Muſquet*. Then

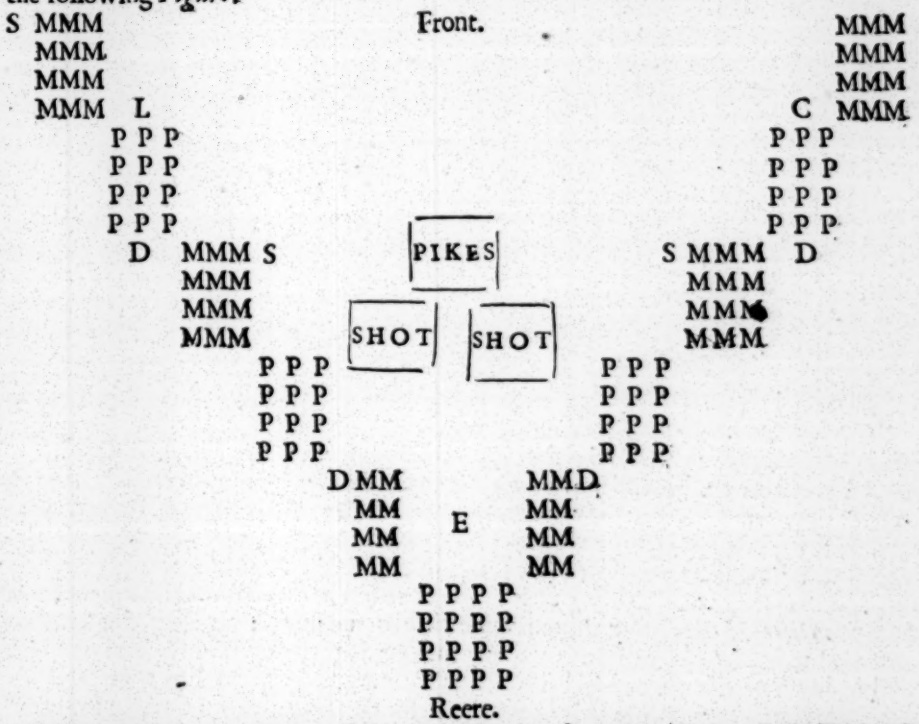
Unſhoulder your Muſquets and poiſe.
Joyne your halfe-pike to your Muſquets.
Pitch your Armes.
If the Wind be high, then
Sinke your Muſquets down to your deviſe.*
In caſe of ſhowers or raine,
Reverſe your Muſquets.
Recover your Muſquets and halfe-pikes.
Draw forth your Match.
Blow your Coale.
Cocke your / *Fit your* } Match.
Guard your pan.
Blow the aſh from your coale.
Open your pan.
Preſent upon your halfe-pike.
Give fire breſt high.
Diſmount, joyning your halfe-pike, to the out-ſide of your Muſquet.
Vncock and returne your match.
Cleere / *Prime* / *Shut* } Your Pan.

* Which moſt call a Ketch.

Caſt off your looſe cornes.
Blow-off your looſe cornes, and bring about your muſquets and half-pikes to your left ſides.
Sinke your Muſquets upon your half-pikes.
Charge with powder.
Draw forth / *Shorten* } Your Scowring-ſtick.
Charge with bullet, and put your ſcouring-ſticke into your Muſquet.
Ram home your charge.
With-draw / *Shorten* / *Returne* } Your Scowring-ſtick.
Bring forward your Muſquets and halfe-pikes.
Raiſe your Muſquets into your Reſts.
Ground your half-pikes for the Horſe.
Draw forth / *Cock* } Your Match.
Blow, Open, and Preſent, either in ſingle ranke, 2. 3. or 4. rankes together.
Give fire altogether.

Now

Now having ended the *Poſtures*, for matter of *firings*, *formes*, and *figures of Battell*; there is none in all the booke, but is *uſefull* one way or other for the *Halfe-pike*: either in the way of a *Reſt*, of a *Halfe-pike*, or of a *Palliſado*, and ſo may be uſed accordingly; but I have too long held you in diſcourſe: proceed we now to demonſtrate ſome more *forms*, the which may be indifferently uſefull, either for *Halfe-pikes* or *Reſts*, &c. Firſt, Command, *Wheele your flankes into the front*, and then *face all as before*, this brings all the *Muſquettiers* into the *Front*. Secondly, Command the foure *innermoſt-files* (as well *Muſquets* as *Pikes*) to ſtand, the reſt of the body to *face* to the *right and left*, and move untill there be *Intervals* made ſufficient to receive the *Muſquettiers* of the ſtanding part, then *ſtand, and face as before*. Thirdly, Command the *three outer-moſt Files of each flanke* to *move*, and leave *Intervals* as aforeſaid. Fourthly, Command the *middle-diviſion ſtand*, the other *diviſions move forwards*, till their *reere* be *advanced even* with the *front-angle* of the *ſtanding part*. Fiftly, Command the *two out-moſt diviſions move forwards*, placing their *Reere* as aforeſaid. Laſtly, Command the *Muſquettiers* to *face outward*, and *move cleere of their whole Pikes*, then *face as before, and ground their Halfe-pikes*, as in the following *Figure*.

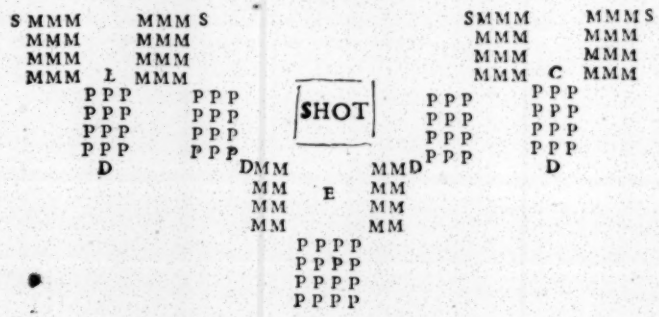


When this *Figure* is drawne, if your *Muſquettiers* be *Reſt-men*, then they may *fire*, and fall in the *Reere* of their owne *diviſions*. Secondly, they may *give fire*, and *flanke* their *Pikes*. Thirdly, they may *give fire* and place themſelves in the *Reere* of their *Pikes*, &c. If your *ſhot* be *Muſquettiers* with *Halfe-pikes*; Then if there be any feare of the *Horſe*, cauſe them to *ground* their *Halfe-pikes*, in the forme they now ſtand, the which being performed, they may *give fire* at diſcretion, either by *ſingle rankes*, by two, three, or foure *rankes together*: having *fired*, they may either *face-about*, and move out of the *Horſe-*

Horſe-mans ſhot, untill they are ready againe; or they may place themſelves *behind their Pikes*, according to the former directions for the *Reſt*, &c. If at any time the *Horſe* chance to find the *Muſquettier* unprovided, that is, take him in the time hee is *charging*, before hee is *ready*, then *three or* * *foure of the former Ranks of ſhot may couch with their Halfe-pikes, (the one end againſt the ground, the other breſt-high) holding it Palliſado-wiſe in the left-hand, their Swords drawn in the right*; in this manner keeping-off the *Horſe*. The *Reer-halfe-files of Muſquettiers*, in the mean time having *made ready*, may ſecurely *poure-out their ſhot upon the Horſe*, either by *ſingle Ranke*, or by *two Ranks* together; which the *Horſe* are not able long to endure. Having *given fire* ſo often as you pleaſe on this *Figure*, Command the *fore-moſt diviſion of Muſquettiers on each Wing, to face-about and move, untill they range-even with the next diviſions of Muſquets, then ſtand, and face as before*. Next, Command the *two fore-moſt diviſions of Pikes face-about, and move, untill their Front range-even with the Reer-angles of the two Front-diviſions of Muſquettiers*, then *face as before*, and it produceth this following *Figure*.

* *Foure Ranks of Halfe-pikes being in this manner charged, are ſtronger then ſix Ranks of whole pikes charged over-hand.*

Front.



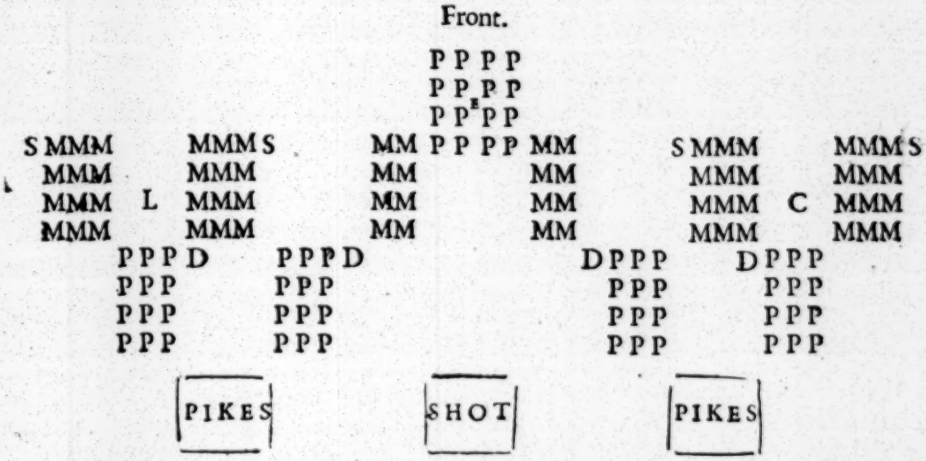
Reere.

When you have well peruſed this *Figure*, you will perceive that each *Battell*, *Manniple*, or *Diviſion*, ſtands well *ordered* and prepared for *fight*; if any *part* happen to bee *diſtreſſed*, the other may readily move *forwards* to their *reliefe*; or they *retreit* without *incumbring* one another. For the wayes to *give fire* on this *form*, there are ſo many, that it were pitty to deſcribe any; for they may *fire, advancing, ſtanding*, or *retreiting*. They may alſo *give fire* and keep their *Figure*, the *Muſquettiers* moving forwards, and maintaining the ſame *ground, flanking* their *Pikes*, or falling in the *Reere* of the *Pikes*. If your *Shot* be *Halfe-pike-men*, then they may doe all this and more; for after that they have grounded their *Halfe-pikes*, (if there be any ſuch need) they may *give fire*, and *retreit*, by paſſing down into the *Intervals* (behind them) keeping themſelves ſecure from the *Horſe-mans ſhot*, untill they have *made ready* againe; for the *Halfe-pikes* ſticking in the ground (*Palliſado-wiſe*) *Rank* after *Ranke*, the *Intervals* are ſafely enough *blockt-up*. They may alſo, having *poured-on their ſhot*, fall behind their own *Diviſions* of *Pikes*: This being done, and the *Muſquettiers made ready* again, then they may *give fire* by * *Extraduction*, the *Pikes porting* over them, &c. Let not the *eaſineſſe* of the making, nor the *aptneſſe* of varying from one *form* into another, any way diſparage the work; for thoſe *Figures* that are beſt for *ſervice*, and *ordered* with moſt *facility*, are ever to be preferred. With ſome little alteration, proceed wee to a third *Figure*: For the making whereof, Command the

* *Of Extraduction, look back into* Chap. 80.

two

two *Reer-diviſions* of *Muſquettiers* to *move forwards, and range even-a-breſt with the other diviſions of Muſquettiers.* Secondly, Command the *Reer-diviſion (or Battell) of Pikes to move forwards, untill the Reere range-even with the Muſquettiers that moved laſt before them.* The *Figure* followeth.



Concerning *Firings*, what hath been ſaid of the *former Figures*, may in like manner be *performed* on this: therefore, not to ſpend more time about it, wee will come to the *Reducement*. And to that purpoſe, firſt command the *Front-diviſion of Pikes face-about, and move even with the other diviſions of Pikes*, then *ſtand, and face as before*. Secondly, command all the *Diviſions (as well Muſquettiers as Pikes) to face to the right and left inward, and to cloſe together into one Body*. This done, next command them *wheele their Reere into the midſt*, (or *Flanks into the Reere.*) Laſtly, all being *faced* to the *proper-Front*, they are *reduced* as at firſt. I might have further inlarged my ſelfe upon this ſubject of *Firings, and Figures of Battell*; and have ſhewed variety enough of *formes*, either *Regimentall*, or for *private* and *ſingle Companies*; as *Trine-Battels, Round-Battels*, the *Croſſe* and *Round* in one, the *Sollid-Square impaled*, with infinite others: But I have advanced farther already, then I at firſt intended; though, well I hope, no further then will be freely, and lovingly accepted: Which if it be, I ſhall conceive my ſelfe to have received a *gratefull*, and moſt *ample ſatisfaction*. The hope whereof doth ſomewhat incourage me to proceed a little further: And as I have already ſhewed divers and ſeverall *Motions*; with a large addition of *Formes, and Figures of Battell*; yea, and in all (or the moſt part of them) I have not onely given the words of *Command* and *Direction*, to produce them from the ordinary *Square*; but alſo together with the demonſtration of the *Figure*, and direction for the *Firing*, I have in like manner given them proper Directions for their *Reducements* again: So now, for the ſatisfaction of ſome of the quainter ſort of *Souldiers*, give me leave to adde one *Figure* unto another, untill that by *Firings I reduce Firings*. For the performance whereof, that I may obſerve ſome *method*, I will *digeſt* them into the way of *exerciſe*, &c.

The reducement.

Nevertheleſſe, before I come to that, give me leave in one word to ſatisfie many, whoſe importunity would have preſt me to have writ ſomething for the exerciſe of the *Cavalry*. For my own part, I ſhould think it a great deal of labour ſpent to little purpoſe therein; ſeeing

ing ſuch Gentlemen that are deſirous of information that way, may buy that excellent Book intituled *Military Inſtructions for the Cavalry*, ſet forth by that worthy, and well-knowing Gentleman, Captaine *Iohn Cruſo* of *Norwich*. Wherein the meaneſt *Cavalier* may gaine knowledge, and the beſt may review, and ſuper-viſe, the *Idea* of his owne experiments.

CHAP. CXIV.

The Firſt dayes Exerciſe.

HAving brought your *Company* into a place convenient, where you intend to *exerciſe them*; if you have time enough, you may cauſe the *File-leaders*, *Corporals*, or *Serjeants*, to inſtruct them in the [a] *Poſtures* and *true uſing* of their *Armes*. Wherein having ſpent ſome time to the benefit of the *Company*, upon the [b] *Summons* of the *Drum*, each *File-leader* with his *file*, is to *march* into his *place*. The *Captaine* (or other *Commander*) being at the head of his *Company*, *commands* them to *even their Rankes*, *and to ſtraighten their Files*, and *ſtand to their* [c] *Order both in Ranke and File*. If your [d] *Enſigne* be not already in the field, but in ſome place neere at hand, then cauſe your *two innermoſt files* of *Pikes* to advance; commanding a *Serjeant* with a *Drum*, to *troope* them along to the place of *Rendezvouz*, there to fetch their *Colours*. If the place be not nigh at hand, take as many *files* of *Muſquettiers*. Having brought the *Enſigne* to the head of the *Pikes*, each *File* returnes into his place; the *Officers* likewiſe withdrawing to their ſeverall *ſtations*. [e] Silence being commanded, the *Captaine*, (or other *Commander*) begins firſt to inſtruct the *Souldiers* in the *ſeverall* [f] *diſtances*, betwixt *Ranke* and *File*, with the wayes to *open* and *cloſe* to them. And if he thinke fit, to inſtruct them in the ſeverall *uſes* of each *diſtance*.

Next after *diſtance*, they are to be inſtructed in the [g] *Facings*, then in the *Doublings*; next in the *Counter-martches*, and laſtly, in *wheelings*. In each of which they are to be inſtructed, according to the opportunity of the *time* and *place*, but eſpecially the capacity of the *Souldier* is to be obſerved. Wherein, the *Captaine* may doe very well, in each of the *motions* to lay downe ſome ſpeciall *rules* and *obſervations*; by which the *Souldier* may the better underſtand what he is to doe, and how (the beſt way) to performe it.

After the *motions* ended, let them *prepare* for *skirmiſh*. And firſt you may cauſe them to *give fire* with *forlorne files*, *martching forth* twenty paces (or there-abouts) before the *Front*. Having all *fired over* that way, they may *give fire* once over, by *advancing two Rankes together*, ten paces before the *Front*. Then let them *give fire*, *even* with the *Front*; and then with the *halfe-files*: the *Pikes porting*, or *charging* according to diſcretion. The *Pikes* being *advanced*, and the *Muſquettiers martched-up even* with their *Front*, you may either [h] *face-about*, *wheel-about*, or *Counter-march*, and ſo *give fire* in the *Reere*; your *Pikes* then being *ſhouldered*. After your *Muſquettiers* have *fired over* in the *Reere*, you may (if you pleaſe) [i] *wheele* your *flankes* into the *Front*, and ſo *charge Pikes* to the *Reer*. Which done, *wheele* your *front* into the *midſt*, paſſe into your place, and *face* them to you. Then (if you will) you may paſſe your *Muſquettiers* of the *left-flanke*, through betweene the *Rankes* of *Pikes*, and place them next to the *right-flanke* of *Pikes*, opening the *right-flanke* of *Muſquettiers* to give them way. Then let the [k] *Pikes ſhoulder*, and *Muſquettiers*

[a] *It is very neceſſary, ſtill ſo often as time will permit, to inſtruct the Souldiers in the poſtures and the well handling of their Armes.*

[b] *Each File-leader to lead up his File upon the firſt Summons of the Drum.*

[c] *Ever to obſerve to be even in Ranke, and ſtrait in File, and ſtand at the true diſtance.*

[d] *Fetching the Enſigne to the head of the Company.*

[e] *Souldiers ought to be very ſilent.*

[f] *Firſt the Souldiers ought to have their due diſtance given them, with directions how moſt properly to perform.*

[g] *Facings, Doublings, Counter-martches, and Wheelings, wherein the Souldier ought treatably to be inſtructed, the Commander always obſerving, what his Souldiers are be hath to deale withall, and to give his directions accordingly. Never ſtriving to put more into the bottle then it can conveniently hold. Obſerve to martch between each firing, and upon each figure as may be convenient.*

[h] *Face-about, or wheel-about; for to counter-martch if any enemy be neere, is very dangerous.*

[i] *Wheele your flankes into the front, if your Souldiers have time enough, or otherwiſe face to the Reere, and charge Pikes.*

[k] *When the Pikes ſhoulder, the Muſquettiers muſt obſerve to ranke even with them.*

give

give fire to the *right* upon a *march*, their *leaders* leading them up between the *Pikes* and their own *diviſions* of *Muſquettiers*. Having *fired* once over in this way, let them continue their *firing* to the *right*, each *leader* leading up his *file* on the *out-ſide* of the *left-flanke* of *Pikes*. Then let the [l] *Pikes advance*, even whileſt the laſt *File* is *giving* of *fire*: and ſo ſoone as the *Pikes* are cleere of the *Muſquettiers*, let them *face all* to the *right*, and *charge*. Having *advanced* your *Pikes*, and *faced* your *body* againe to the *left*, you may then *wheel* your *battell about* to the *right*, and then *facing* the *whole body* to the *left*, the *Muſquettiers* will be all in *Front*. Then let your *Muſquettiers give fire*, and *wheele all off* to the *right*, the *Officers* to that end making an [m] *Intervall* for the *left-flanke*, or elſe let them *wheel-off* by *diviſion*, placing themſelves in the *Reer* of their own *diviſions* of *Musquettiers*. Having *given fire* once (or oftner) *over* that way, let them *give fire* againe, and *wheel-off by diviſion*, *ranking even* with their *Pikes*. That being done, cauſe the *Pikes* to *charge*, the *Muſquettiers giving fire once over*, on that *figure*. The *Pikes* being *advanced*, *face* the whole *body* to the *right*, and cauſe the *Muſquettiers* to *ſtand*, and the *Pikes* to *open* to the *right* and *left* and ſo to make the [n] *hollow Square*. Then you may (if you pleaſe) *command* the *Enſigne* to *diſplay his Colours* in the *midſt* of the *hollow*, in ſigne of *triumph*, the *body* either *ſtanding* or *marching*. After which, command the *Pikes* to *cloſe their diviſions*: Which being performed, command the *Reer-diviſion* of *Muſquettiers*, to double their *Front* of *Pikes* by *diviſion*, and then they will ſtand in forme of [o] Captain *Wallers triple firing*: Let them *give fire* upon that *figure*, and *fall-off* again, according to the directions upon that *figure*. Which being performed, and the *Pikes charged*, and *re-advanced*, the *body* will be abſolutely *reduced* as at the firſt it was before you began your *firings*. Theſe *firings* may (with the *motions*) be ſufficient for the *firſt dayes Exerciſe*. Wherfore, for this time, we will *lodge our Colours*, untill by the *Summons* of the *Drum*, we are *called forth* to the *ſecond dayes practiſe*.

[l] Upon this firing, advance *Pikes* when there is but one file of *Muſquettiers* to give fire, and cloſe forwards to the diſtance of order.

[m] Theſe kind of *Intervals* ought to containe ſixe foot in diſtance, upon ſome other occaſions, 12. foote is neceſſary.

[n] The hollow ſquare, with Muſquetts in front and reere, *Pikes* on the flankes.

[o] Captain *Wallers* firing, as in ch. 93.

CHAP. CXV.

The ſecond Dayes exerciſe.

HAving brought your *Souldiers* the ſecond time into the *field*, the body being drawn up into the ordinary ſquare, and every *Officer* vigilant in his place: the *Captaine* commandeth [a] *ſilence*, with ſome other generall termes of *obſervation*, both for the *leaders* and *right-hand-men*. Having thus commanded them (as before) to *even their* [b] *rankes*, and *ſtraighten* their *files*, he proceeds to ſhew (as formerly) the *diſtances*, the *facings*, the *doublings*, the *Counter-martches*, and the *Wheelings*: therewithall inſtructing them either in *all*, or ſo many of them as the time will permit, and he thinks convenient. Ever (by the way) obſerving that in the Proverbe, *A thing once well done, is twice done*. That Commander, that *exerciſeth* his *Souldiers* with [c] good *language*, and with *ſollid reaſons*, ſhall make them better *proficients* then he that ſhall uſe rigid termes, and rough hands. After the *Poſtures*, *Diſtances*, and ſeverall *motions*; that which next followes for this dayes *Exerciſe*, are *firings* and *figures* of *Battell*. So ſoone, therefore, as the *Drum* begins to *beat a preparative*, the *Muſquettiers* are to begin to [d] *make ready*.

[a] *Silence.*

[b] *Vpon all motions be ſure that the Souldiers ſtand even in rank and file.*

[c] *Good words more available then blows, or ill language.*

[d] *The Muſquettiers make ready to give fire.*

And firſt, you may cauſe them to *give fire* on the [e] *Horn-Battell*, ſtill *martching-up* into their *leaders ground*, by that meanes preſerving their *Figure*.

[e] *Horn Battell as in* chap. 75.

Secondly, let the *Muſquettiers cloſe* their *diviſions* before their *Pikes*, and then *give fire* upon the [f] *demy-Hearſe-Battell*: *falling-off* preſently, either all to the *right*, (the one halfe paſſing downe an *Intervall*) or to the *right* and *left* by *diviſion*; and placing themſelves in the *Reere* of their owne *diviſions* of *Muſquettiers*.

[f] *Demy-Hearſe, as in* ch. 76. *Between each firing cauſe your body to martch either in form of Battalia, extended in length: or upon any other figure, ſo that it may conveniently be done without diſorder.*

The third time of their *firing*, let them *wheele-off* by *diviſion*, and *flanke* their *Pikes*; and when they have *fired over* that way, let the *Pikes charge*.

For the fourth *firing*, let them *give fire even* with the *Front* of *Pikes*, *wheeling-off* to the *right* and *left*, and placing themſelves in the *Reere* of their owne *diviſions*.

Then let them *fire even* with the *halfe-files*, *wheeling-off* by *diviſion*, and placing themſelves in the *Reere* of the *Pikes*. The *Pikes* (you are to underſtand) ought to *charge* all the time of the laſt *Firing*; who being *advanced*, *wheele* your *Battell* about to the *right* or *left*.

A firing in the Reere.

Then your *Muſquettiers* being in the *Reere* of your *Pikes*, let your *ſixth Firing* be to the *Reere*: the *Muſquettiers wheeling-off* by *diviſion*, and placing themſelves before the *Front* of their owne *diviſions* of *Muſquettiers*, next behind the *Reere* of *Pikes*. Having *fired once over* that way, let them *give fire* over again, and *flank their Pikes*: which being in like manner performed, command them to *wheele* their *Flanks* into the *Front*, and then *face* to the *Reer*, and *charge Pikes* at the *in-ſide* of the *right-foot*, with their *Swords drawn* in their *right-hands*.

* *In ſtead of giving fire over their Pike-men, they may give fire by Extraduction, as in* Chap. 80.

Let the *ſeventh Firing* be *diſcharged* * *over their Pike-men*, *wheeling* either all *off* to the *right*, through *Intervals*; or elſe by *diviſion*, and placing themſelves in the *Reere* of their *owne files*. Otherwiſe (for want of roome) the *firſt-rank* of *Muſquettiers* having *given fire*, let them *kneele*, or *crowch* low upon the ground, and *make-ready* again; the *ſecond-rank* in like manner *firing*, and *kneeling*: and ſo for the reſt. Having all *fired once over* in that manner, let the *Pikes advance*, and put up their *Swords*: the *Muſquettiers*, in like manner, are to *riſe*, then to *even* their *Ranks*, and *ſtraighten* their *Files*.

[a] *This Figure is moſt commonly called the Broad fronted Battell But moſt properly the Long-fronted Battell; for that the length is the extenſion betweene flank and flank; this is in* Ch 80.

For the *eighth Firing*, you may *face* the *Body* to the *Reere*, (or if you will continue your *Firing*, the ſame way) then *wheele* your *Battell about*, and having *opened* your *Intervals*, your *forme* will be the [a] *Broad-fronted Phalange*, or *Broad-fronted Battell*. Let theſe *give fire*, the firſt time *falling* (or *wheeling*) all *off* to the *right*, and placing themſelves in the *Front* of the *Pikes*, and *Reere* of their *own diviſions* of *Muſquettiers*. The ſecond time of *Firing*, let them *wheele* all *off* to the *right*, (as before) and place themſelves in the *Reere* of the *Pikes*, which follow next after their *own diviſions*. In the *interim* of the *laſt two Ranks firing*, cauſe your *Pikes* to *port*; but when the *Muſquettiers* are *cleared away*, the *Pikes* may *charge*.

[b] *Convex halfe-moon, as in* Ch. 79

When the *Pikes* are *advanced*, and that they have *cloſed* their *diviſions*, for the *ninth Firing*, *face* them to one of the *Flanks*, and *wheele* them into a *Semi-circle* or [b] *Convex halfe-moon*; where the *Muſquettiers* being *outer-moſt*, *give fire* upon that *Figure*: the firſt time falling behind the *Muſquettiers* of their *owne diviſions*; the ſecond time of *firing*, cauſe them to place themſelves behind their *Pikes*. For further *directions*, look back upon *Chap.* 79. which diſcourſeth of the *Convex halfe-moon*. The *Pikes* may alſo *charge*, and the *Muſquettiers give fire* over again, according to diſcretion. The *Pikes* being *re-advanced*, *face* the whole *Body* to one of the *Flanks*, and *martch* them out *Herſe-wiſe*: Then command them to *double their Ranks to the Right*: which being done, command that *Flank* which are *Muſquettiers* to *double* the *contrary Flank* by *diviſion*: which being performed, all the *Muſquettiers* will be in *Front* and *Reere*: Then cauſe the *Reer-diviſion* of *Muſquettiers* to *double* the *Front* of *Pikes* by *diviſion*. Then let them *give fire* on that *Figure*, as you may ſee further directions in *Chap.* 93. The *Pikes* having *charged*, and *advanced* again.

For the *eleventh Firing*, firſt *face* the whole *Body* to the *right*; then cauſe the *halfe-files* that then are, to *face* to the *Reere*; and ſo let the *Muſquettiers give fire* to the *Front* and *Reere*, *wheeling-off* by *diviſion*, and *flanking* their *Pikes*. The *Pikes* may alſo *charge*

to the *Front* and *Reere*; which being performed, *face* them all again to their [c] *Leader*.

For the *twelfth Firing*, make the *Plinthyum* or *four-fronted Battell*: the *Angles* whereof being filled with *Musquettiers*. For further satisfaction, look upon *Chap.* 102. which gives *direction* both for the *motion* and *reducing* thereof. Next, *face* the whole *Body* to that part which was the *Front* before the *last Firing* began. Then, if you would have your *Ensigne* to *display* in an *hollow Square*, cause your *Musquettiers* to *stand*, and *half-files* of *Pikes* to *face* to the *Reere*; and so both *divisions* of *Pikes* to *march*, untill their *last ranks* are *even* with the *Front* and *Reere* of *Musquettiers*: Then *face* all to their *Leader*. If you please, the *Musquettiers* may *give fire* upon this *hollow Square*, as they *march*, to both *Flanks*; still *leading-up* their *files* on the *in-side* of their *own divisions*: and this will make the *thirteenth Firing*.

[c] *The Leader is then conceived to stand on that part which was the right-flank, the which was the front of the eleventh Firing.*

But, by this time, our *powder* being *spent*, our *men weary*, and *night* approaching, wee will come to the *Reducement*. Wherefore, first cause the *Pikes* to *close* their *divisions*, and the *Musquettiers* to *march-up even* with their *Front* of *Pikes*. Then let the whole *Body wheele* their *Flanks* into the *Reere*; which being done, all the *Musquettiers* will be in the *Reere*. Then (if you will) *face* to the *Reere*, and *give fire*, causing your *Musquettiers* to *wheel-off* by *division*, and to *flank* their *Pikes*. Or else, cause your *Musquettiers* to *open* to the *right* and *left*, and *double* your *Front* of *Pikes* by *division*. Which being done, *double files* to the *left*, and they will be all *reduced* as at first. Wherefore, we will now *lodge our Colours*, and conclude our *second dayes exercise*.

CHAP. CXVI.

The third dayes Exercise.

HAving the third time (as formerly) brought your *Souldiers* into the *Field*, it is very necessary, in the first place, that they be taught the *Postures* of each *Armes*; either by the *File-leaders*, or some other of the *Officers*. Wherein, they must be carefull to instruct them in the *Firings*, both to *Front*, *Reere*, and *Flanks*: As to *give fire* to the *Front*, *advancing*; to *give fire* to the *Front*, upon a *stand*: to *give fire* to the *Reere*, upon a *March*: to *fire* to *either Flanke*, *marching* or *standing*. As also to instruct them in *Distances*, *Facings*, *Doublings*, *Counter-marches*, and *Wheelings*; that so they may be the more *apt* and *capable*, when they shall be brought into a *Body*. Having spent some time in the *exercising* of *Files*, let the *Drum summon* each *File-leader* to his place; the *Ensigne* be fetcht to the *head* of the *Company*; the *Captain* command *silence*; and the *Souldiers* tender *obedience*. The *Ranks* being *evened*, and the *Files straightened*, the *Captaine* (according to his accustomed manner) begins to instruct them in the *Distances* and *Motions*: And after the performance of so many of them as hee shall think fit for the present *Exercise*, hee commands the *Drummes* to *beat*, and *Musquettiers* to *make ready*; and so causeth them to *give fire* * three or foure severall wayes, after the ordinary manner of *firing* in the *Front*.

Whosoever it be that teacheth the Postures of the Musquet, ought to be very diligent in his instruction, concerning the well-manneging of their Armes; that they may not onely fire to the Front, Reere, and Flanke; but that they observe order in their motion, which will better their execution.

Then cause your *Musquettiers* of the *left-flank*, to *give fire* to the *Reere*; and the *Musquettiers* of the *right-flanke*, to *give fire* to the *right*. This *Firing* is to be performed upon a *March*, the *Pikes shouldered*.

For the *second Firing*, let them *give fire* to both *Flanks*. The [a] *gathering Firing*.

For the *third*, let them *fire* to both *Flanks*, *drawing them up* between the *divisions* of *Musquettiers* and *Pikes*.

The File-leader, if hee have time, may instruct his File in the Distances, and the severall Motions. * *By drawing forth of loose Files, or otherwise.* [a] *The gathering Firing, as in* Chap. 83.

For the *fourth Firing*, let them *give fire* again to both *Flanks*, *leading them up*, after they have *fired*, between the [b] *midſt* of *Pikes*. When the *laſt Files* are *firing*, *advance* your *Pikes*, and *cloſe* your *Ranks* forwards to their *Order*. Then, *face* to the *right* and *left*, and *charge Pikes*. Your *Pikes* being *advanced*, and *faced* again to the *Front-proper*, all your *Muſquettiers* will be in the *midſt*.

[b] *Drawing-up the Muſquettiers between the Pikes, as in* Chap. 87.

Then open them ſome *Intervals*, and let the *fifth Firing* be to the *Front*, *wheeling* all *off* to the [c] *right*, and placing themſelves in the *Reere* of their owne *diviſions*. Then cauſe the *Pikes* to *charge*, and when your *Pikes* are *advanced* again, let your *halfe-files face-about* to the *right*.

[c] *At in* Ch. 101.

And ſo the *ſixth Firing* may be to the *Front* and *Reer*; the *Muſquettiers* of the *Front-diviſion*, *wheeling-off* to the *right*; thoſe of the *Reer-diviſion*, *wheeling-off* to the *left*; either of them placing themſelves in the *Reere* of their owne *diviſions*. The *Muſquettiers* having *fired once* or *twice over*, *wheele* your *Flanks* into the *Front* and *Reere*, and cauſe your *Pikes* to *charge* to the *Front* and *Reere*. The *Pikes* being again *advanced*, and all *faced* to their former *Front*, *wheele Front* and *Reere* into both *Flanks*, and *face* as before.

For the *ſeventh Firing*, make the [d] *Plinthyum*, or *Foure-fronted Battell*; the *Angles* being filled with *Pikes*: and let them *give fire*, and *charge* their *Pikes*, according to *directions* for that *Figure*. As likewiſe, the *Firing* being ended, *reduce* the men back into their places, as they were before this *Firing* began. Then, *wheel-off* your *Front* by *diviſion*; which brings your *Muſquettiers* upon the *Flanks*, but doth not *reduce* your men juſtly into their places, if your *number* be any thing great.

[d] *The Plinthyum is in* Chap. 102.

From thence, make them a perfect [e] *Croſſe-Battell*, and let your *Muſquettiers give fire*, *wheeling* all *off* to the *right*, placing themſelves in the *Reere* of their owne *diviſions* of *Muſquettiers*.

[e] *The Croſſe-Battell, as in* Chap. 99

For the *ninth Firing*, let them *give fire* as before; but place themſelves in the *Reere* of their *Pikes*; the *Pikes* moving forwards into their *ground*, and *charging*. Having *advanced* your *Pikes*, command your *Flank-diviſions* to *face-about* to the *right*, and to *cloſe* their *diviſions*. Then command the *Front* and *Reere-diviſions* to *wheele* their *Flanks* into the *Reere*: which being done, *face* them to the *Front-proper*, (that is) after the *right File-leaders*.

For the *tenth Firing*, (your *Muſquettiers* being ſtill in the *midſt*) let them *give fire* by [f] *Introduction* twice over, (ſtill beginning with the *ſecond-rank*) the *Pikes* moving ſoftly forward.

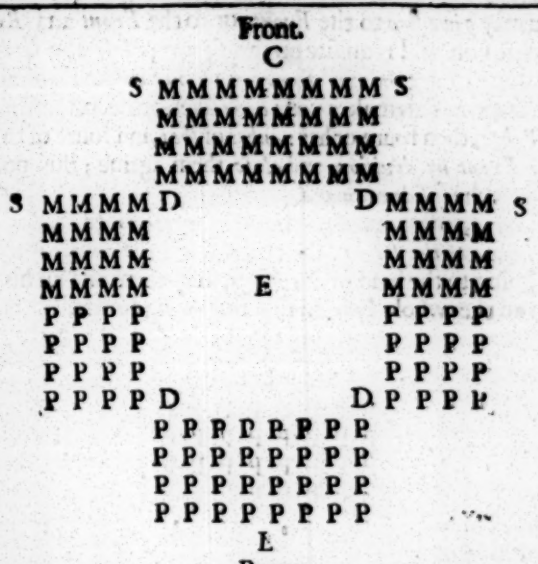
[f] *Introduction, as in* Chap. 77.

For the *eleventh Firing*, let them *give fire* by *Introduction*, (beginning with the *Bringers-up*.) The *Pikes* may *charge* at diſcretion: Then let the *Muſquettiers ſtand*, and the *Pikes march forwards*, *cloſing* their *diviſions* before the *Muſquettiers*.

And ſo let the *twelfth Firing* be by way of *Extraduction*. Let the *Pikes charge*; which being performed, command the *firſt* and *laſt* foure *Ranks* to *ſtand*, and the reſt of the *Body* to *face* to the *right* and *left*; and ſo to move, untill they are cleare of the *ſtanding Ranks*. Then let the whole *Body face-about* to the *right*, and let the *Enſigne* diſplay his *Colours* in the *midſt*, the *Body* ſtanding in this following *forme*.

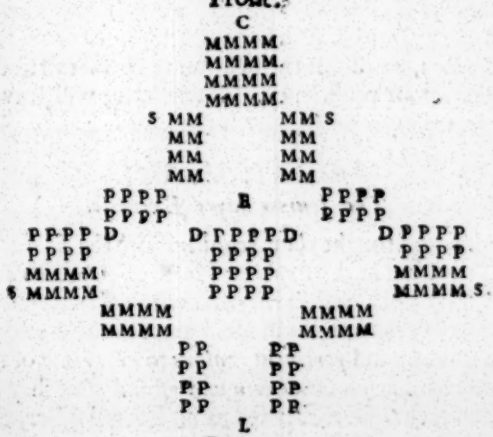
This Firing is demonſtrated in Chap. 80.

Foure.



The *Muſquettiers* now being fore-moſt, let the thirteenth be a *triple firing* to the *front*, having *fired*, let them *wheele-off* to the *right* and *left*, the *front-diviſions* falling in the *reere* of themſelves: the *flanke-diviſions* in the *reere of their Pikes*; they moving forwards, and *maintaining* the *Muſquettiers ground*. The *Pikes* on the *flanks* may *charge*: the *Muſquettiers* of the *front-diviſion* had need be *Halfe-pike-men*, that ſo they may defend themſelves from the *Horſe*.

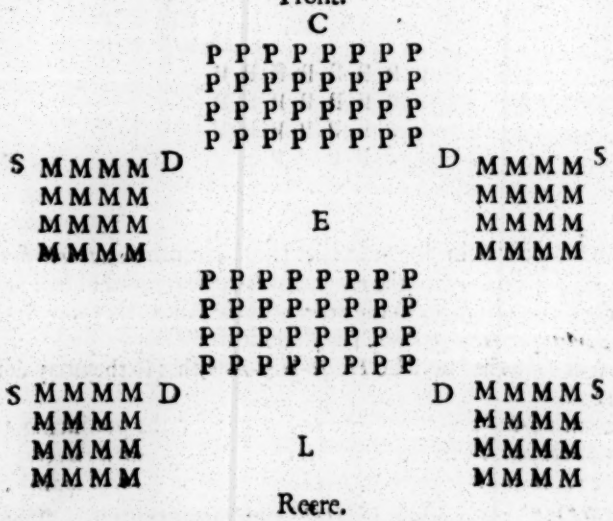
For the fourteenth *firing* make the *Crowne-battell*: for the producing whereof obſerve theſe following *directions*. Firſt, command the *foure middle-moſt rankes, of the flanke-diviſions face to the right and left outward, and move cleere of the ſtanding parts*. Secondly, command the *foure inner-moſt files of the front and reere-diviſions to move forwards untill they ſtand cleare of the ſame Armes*: This being rightly performed, this following *figure* will be produced.



In this *forme* you may *give fire* to the *Front*, or to the *Front* and *Reere* at discretion: having performed what you hold requisite on this *figure*; *close* the *divisions* back again into their *places*, (that done) *Face the two flanke-divisions* to the *right* and *left inward*, and let them *close* in like manner. This makes your *body* sixteen deep, foure *rankes* of *Musquets* and foure *rankes* of *Pikes*, then foure other *rankes* of *shot*, and foure of the contrary *Armes*. Next, *wheele off your Front by division*, and *close* them againe; this nothing altereth the *forme*; but onely brings the *inside outward*.

Or wheele your front inward to the Reere.

For the fifteenth *firing*, first command the *Musquettiers* to *face to the right and left outward, and move cleere of the Pikes*, then stand, and the *whole body face-about to the right*, the *Captaine* going to the head of his *Pikes*, shall there find all his *proper file-leaders faced* towards him, and the whole *body* in this following forme.



Let the *Musquettiers give fire to the Reere*, and *both flanks marching*. They may *give fire* and keep their *Figure*, or they may *give fire* and *flanke* their *Pikes*: If the latter, then command the *reer-division close forwards*, and all is *reduced* as at the first. If the former then *all the divisions are to close forward*. And herewith we will conclude our *third dayes Exercise, and lodge our Colours*, untill that the bellowing *Drum* call us the fourth time into the *field*, to give an account of our proficiency. Till when, we will leave our *Souldiers* to repaire to their *quarters*, rest their *limbs*, refresh their *spirits*, and replenish their *bandiliers*.

The Reducement.

CHAP. CXVII.

The fourth dayes Exercise.

HAving the fourth time brought your *Souldiers* into the *field*, and (as formerly) caused them to be instructed in the *Postures* (both of *Musquet* and *Pike*) that so they may be capable to use them both with *agility*, and with *safety*. As likewise taught them their divers wayes of *distance*, with the severall and various *motions*; not forgetting particularly to instruct them with *rules* and *pertinent reasons* to every one of them: that so they may not onely learne to doe, but like *rationall men understand* what they doe. Which being deliberately performed, and each *Officer* disposed to his severall *place*, the *ranks* being *evene*

and the *files ſtraightened*; the *Captain commands*, the *Drum beats*, and the *Muſquettiers make ready* for *skirmiſh*, &c.

The *firſt Firing*, being by drawing-forth the *inner-moſt files* of each *flank* of *Muſquettiers*, to the *right* and *left*, obliquely before the *Front*; and ſo to *ſtand* and *give fire*. Having *given fire*, let the *Bringers-up lead* them back into their *places*. And, in the meane time, let the next *inner-moſt files lead-forth* and *fire*, after the ſame manner; and ſo likewiſe the reſt, untill all the *Muſquettiers* have *fired once over* that way.

You may either draw forth the inner-moſt or outer-moſt at diſcretion.

For the *ſecond Firing*, let them *give fire* [a] *obliquely*, and *croſſe* the *Front*, both at once.

[a] *As in* Chap. 99.

For the *third*, let them *give fire obliquely*; the *Muſquettiers* ſtanding before the *Pikes*, in form of an *hollow wedge*. Upon this *Firing* the *Muſquettiers fire outward*; whereas in the *other* they *fire inward*.

For the *fourth Firing*, let them *fire* upon the [b] *oblique* W. For the manner of theſe *Firings*, with the wayes both how to *make* them and *reduce* them, I referre you to their ſeverall places, where I have ſhewn them plainly.

[b] *As in* Chap. 97.

For the *fifth Firing*, let them *give fire obliquely* on the *Fort-Battell*; that is to ſay, to *Front*, *Reere*, and *Flanks*. Theſe *oblique Firings*, howſoever that ſome of them may at ſome times be uſefull, yet here they are inſerted but for variety of *exerciſe*, and no otherwiſe to be accounted of. In all theſe *oblique Firings* the *Pikes* never come to *charge*; but ſtand either in a *hollow* or *ſollid Square*, in danger of the *Enemies ſhot*; themſelves neither being able to *offend the Enemy*, nor to *defend themſelves*. And yet, if by frequent *practice* they were *inured* to the uſe of the *long-Bow* faſtened to their *Pikes*, I make no queſtion but that when they ſhould become expert in the uſe of the [c] *Bow and Pike*, they would not onely be a *terrour* to their *Enemies*, by the continuall *ſhowers* of *Arrowes* which they would ſend amongſt them; but alſo they would be a great means to *rout* their *Battalions*, and utterly *break* their *Order*. On the contrary, if men ſhould be put to uſe the *Bow and Pike*, and have not firſt well learned the uſe of the *Pike* alone, they would be ſo *cumberſome* to themſelves, and ſo *troubleſome* to others, that in ſtead of *ſpoyling* their *Enemies*, they would *rout themſelves*. But pardon this digreſſion, whileſt I proceed to the reſt of this *dayes Exerciſe*.

[c] *Expert Bow-men may be very ſerviceable.*

The *ſixth Firing*, being in form of a [d] *Romane* T, is to be made as followeth: Let the *Pikes ſtand*, and the *Flanks* of *Muſquettiers wheele* into the *Front*: then let them *give fire*, making an *Intervall* upon each *Flank*; the *Muſquettiers* of the *Right-flank wheeling-off* to the *right*, the *Muſquettiers* of the *Left-flank* to the *left*, and placing themſelves in the *Reere* of their owne *diviſions*. When the *Muſquettiers* have *fired once* or *twice over*, let the *Pikes paſſe through*, and *wheele* their *Front* into the *midſt*; and then *facing* to the *Front*, let them *charge* their *Pikes*: and from thence having *advanced* their *Pikes*, let the *Commander paſſe* to the *Right-flanke*, and *face* the whole *Body* to the *right*. Then *wheele* the *Battell about* to the *Left*, untill the *Body* be brought into a *round Battell*: from whence wee will begin the *ſeventh Firing*.

[d] *In this forme if the Muſquets ground their halfe-pikes, and the Pikes open to the right and left to the utmoſt Angle, then the Musketteirs after that they have fired may retreat to the Reer of the Pikes whileſt they charge to the Flanks.*

The *Figure* being made, *face* the whole *Body* to the *Center*, and give them their *directions*, what they have to doe. When they have received their *inſtructions*, let them all *face-about* to the *right*, *preſent*, and *give fire*. The *firſt time* of their *firing* placing themſelves in the *Reere* of their owne *Muſquettiers*: The *ſecond firing*, *counter-martching* to the *right*, and placing themſelves in the *Reere* of their *Pikes*: The *Pikes* at the ſame time are to move forwards into the *Muſquettiers ground*; where they may *charge over-hand*, and (if need be) at the *foot*; the *Muſquettiers giving fire* over them, as in the *Convex halfe-moon*. The *Firing* being ended, and the *Pikes advanced*, let the *Commander martch-forth* of the *round Battell*, at that part where hee ſhall find all his *proper File-leaders*:

[e] *A quaint Reducement for a knowing Company; but not for a large or ignorant number.*

Then let the whole *Body* be *faced* to that part, and the *File-leaders* cauſed to *march-forth even-a-breſt*, the *Muſquettiers* and *Pike-men* following their *leaders*, and *marching* untill the *Body* have attained their *orderly Square* again. But note, that all your *Muſquettiers* are in the *midſt* of the *Battell*.

The eight firing is the impaled ſollid ſquare.

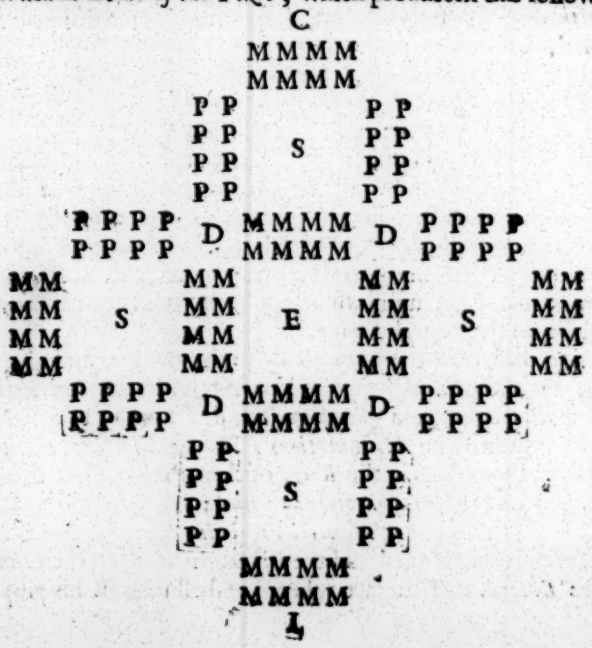
For the *eighth Firing*, make the *impaled ſollid Square*: the way to performe it is as followeth.

Your *Pikes* being now the *Flankers*, *draw-forth the moity* of the *files* of *Pike-men* from the *right-flanke*, croſſe the *Front* of the *Body*, (taking the *out-moſt files*) let halfe the *files* of *Pike-men* of the *left-flank* be *drawn croſſe* the *Reere*, following their *Bringers-up*.

Then, *face* all your *Muſquettiers* to the *Front*, *Reer*, and *Flanks*: The *Pikes* may *charge* all *over-hand*, and (if need be) at the *foot*, with their *Swords drawn*; the *Muſquettiers firing* over them. Having *fired*, *charged*, and *advanced* their *Pikes*, *draw-off* the *Pikes* again, from the *Front* and *Reere*, into their *places*.

The hollow fronted Croſſe, the Muſquets making the hollow, is demonſtrated in *chap.* 100.

For the *ninth Firing*, (the *Muſquettiers* being ſtill in the *middle*) make the *hollow-fronted Croſſe-Battell*; the *Pike-men* making the *hollow*, upon the *Flanks* of the *Muſquettiers*. For the making whereof, *wheele* the *Front* of the *two firſt Ranks* into the *midſt*: That being done, *wheele* the *Reere* of the *two laſt Ranks* after the ſame manner; and then *face* the reſt of the *Body* to the *right* and *left*, and cauſe them to *march* untill there be a *Square hollow in the midſt* of the *Battell*. Then command them to *face* to the *Front*, *Reer*, and *Flanks*: which being in like manner performed, cauſe the *Pikes* (who are now in the *Front* of the *Muſquettiers*) to *open* to the *right* and *left*; the *laſt Rank* of *Pikes ranking-even* with the *firſt Rank* of *Muſquettiers*. The *Muſquettiers* may *give fire* upon this *Figure*, *wheeling* all *off* to the *right*, and placing themſelves in the *Reere* of their owne *diviſions* of *Muſquettiers*. If need be, the *Pikes* may *charge* to the *Angle*, whileſt the *Muſquettiers give fire* ſtraight forwards. This being done, and the *Pikes* again *advanced*, for the *tenth Figure* make the *quintipled-hollow-ſquare*, by commanding the *two firſt Ranks of each diviſion*, *move forwards cleare of the Pikes*; which produceth this following *Figure*.

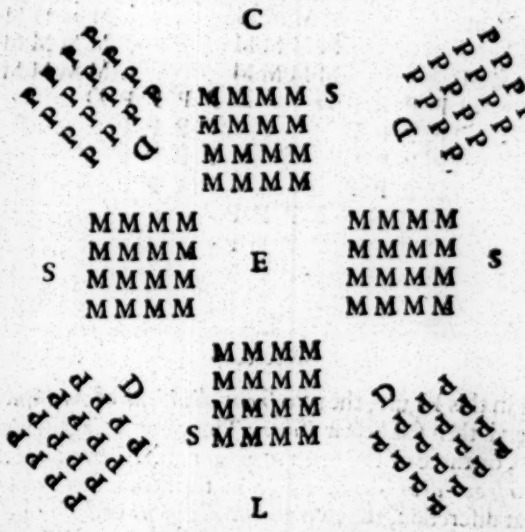


When

When you would come to *firing*, cause the *Musquettiers* in the *midst* to *close to the Front, Reer,* and *Flanks*; and so they may *give fire* accordingly. The *first firing* the *Musquettiers* may make good their *ground*: the *second* time of *firing-over*, they are to *rank-even* with the *Pikes*: the *third* time of *firing*, the *Pikes* move a little forward, and the *Musquettiers* lose ground; which brings them again into the *hollow-fronted Crosse*: all the while the *Musquettiers* are *giving fire*, the *Pikes* are to *port* and *charge* to the *Angles*. Having *advanced* your *Pikes*, Command them to *close their divisions before the Musquettiers*: that done, Command all the *Pikes* to *face to the right, and move into the space between the Angles of the Musquettiers*; which produceth this following *Figure*; from whence wee will make our *eleventh Firing*.

When the Musquettiers first give fire, they will stand in the forme of a hollow diamond: I forbear the figure, it may easily bee conceived.

Front-proper.



On this *double Crosse-Battell* you may, if you please, *give fire* to the *Front, Reere*, and *Flanks*: it is an excellent *Figure* for *Musquettiers* with *Halfe-pikes*; for that they may move forwards and ground their *Halfe-pikes*, and then *give fire, one, two, three*, or *foure Ranks* together; *wheeling-off*, and maintaining the place where their *Half-pikes are grounded (Pallisado-wise:)* or they may *fire*, and *retreit* into this *Figure*, and there *make-ready* and *fire* again: the *Pikes* may *charge*, &c.

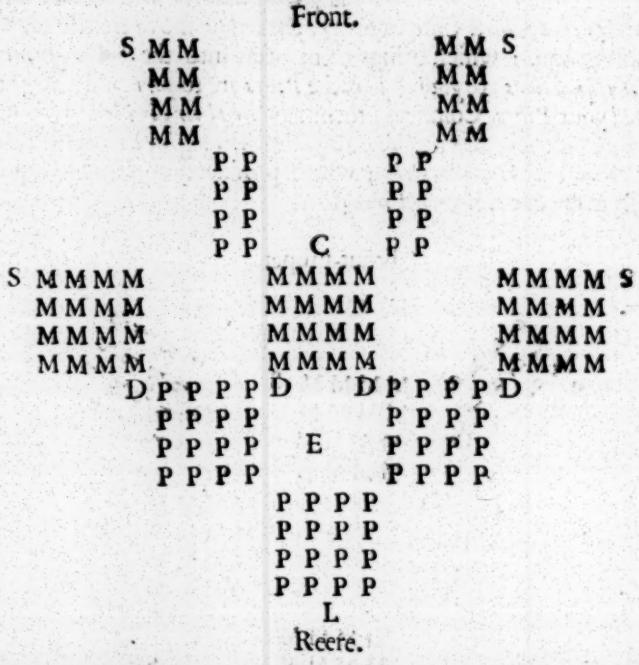
The eleventh firing.

When the *Pikes* are again *advanced*, let them move to the *left* into their places before the *Musquettiers*, and the whole *Body face* to the *Front*.

To make the *twelfth Figure*, first, Command the *Musquettiers of the Flank-divisions to interchange ground with their Pikes, and then to move forwards, untill the Reere be advanced even with the Front-angle of their owne Pikes*. Secondly, Command the *Musquettiers of the Front-division to sleeve-up to the right and left of their Pikes, untill the Reere be advanced even with the Front of Pikes*. Thirdly, Command the *Musquets of the Reere to move forwards, and range-even with the Musquettiers of the Flank-divisions*. Fourthly, Command the *Front-division (as well Musquets as Pikes) to open to the right and left, leaving an Intervall for the Musquettiers behind them.*

And when they be opened, let the Musquettiers move forwards as in the Figure.

them. Lastly, *close the Pikes forwards in the reere*, that their *front* may be *even with the reer of the two other divisions.* The *Figure* followeth.



The *Body* standing in this Figure, the two *front-divisions* of *Musquettiers* may *give fire* once or twice over, and then *flank* their *Pikes*: They may *fire* again and fall in the *reere* of their *Pikes*. One, two, or three of the other *divisions* of *Musquettiers* may *move* forwards and *give fire*, the two *front-divisions* of *Pikes* in the meane time *charging*. Having *fired* twice or thrice over at discretion, the two *middle divisions* of *Pikes* are to *move forwards*, to *port* and *charge*, the *Musquettiers* in the mean time *firing* and *losing ground*. By which meanes the *flanke-division* of *Musquettiers* will againe *flanke* their *Pikes*. Then, because we will come to *reducement*, First, command the *middle division* of *Musquettiers* (the which pertaine to the *reere*) to *move back into their places*. Secondly, command the *two front-divisions to close together*. Thirdly, command the *Musquettiers* and *Pikes* of the *flank-divisions* to *interchange ground*, and then *close their divisions*. Fourthly, command the *front* and *reer-divisions* to *wheel their Musquettiers* into the *midst*. Lastly, *wheel-off your buttell by division*, after which having *closed* their *divisions*, they are perfectly *reduced* as at first. And herewith we will conclude this dayes *Exercise*, and leave our *Souldiers* to rest, untill that the *morrows Sun*, and the *thundring Drum* shall call us forth againe into the *Field.*

CHAP. CXVIII.

The fifth daies Exercise.

* *The Postures cannot bee too often practised by young Souldiers.*

HAving the fift time brought your *Souldiers* into the *Field*, if you have leisure, it will not be amisse for to cause them to be instructed (in the first place) in the *Postures* of the *Pike* and *Musquet*. For those *Souldiers* which by often practise of their * *Postures* are growne

growne *perfect*, will mannage their *Armes* with *eaſe*, *ſurety*, and *celerity*, when on the contrary, the *unpractiſed Souldier*, will be a trouble to himſelfe, a danger to his *fellowes*, and a dormant to his *Enemies*.

After the *Poſtures*, each *file* being drawn into his place; and the *Enſigne* (according to the former directions) brought to the head of the *Pikes*; the *rankes evened*, and the *files ſtraitned*, the *Captaine* having commanded *ſilence*, and delivered himſelfe in ſuch termes as the preſent occaſion doth require, (ever preferring the *induſtrious* and *painfull*, and on the contrary, blaming the *careleſſe* and the *ſlothfull*) he next proceeds to inſtruct them in their *ſeverall diſtances*; and theſe indeed are the *ground* of all *motion*: ſeeing that without *diſtance*, the *motions* cannot be *executed*. Next to the *diſtances*, they are to be inſtructed in the *motions*, ever obſerving to each *motion*, its due *diſtance*.

Diſtance is the ground of motion, becauſe no motion can properly bee performed without its due diſtance.

Next after *poſtures*, *diſtance*, and *motions*; let the reſt of the *dayes Exerciſe* be ſpent in *firings* and *figures* of *Battell*. Each *Officer* having now received his ſeverall *Charge*; The *Captaine commands*, the *Drums beat*, and the *Muſquettiers make ready*.

Let the *firſt firing* be performed by *leading-forth* the *outermoſt file* of each *flanke*, twenty or thirty *paces* before the *front*. When being come to the place of *firing*, (where they may ſurely do *execution*) let them *ranke foure*. That is to ſay, the three men next behind the *right-hand file-leader*, ſhall *ranke* inward to the *left*, even with their *file-leaders*: the three next *men* after the *left-hand file-leader ranking* inwards to the *right*, even *a-breſt* with the *leader* of their *file*, the reſidue of each *file*, keeping themſelves in *file*, and cloſing forwards to the *diſtance* of *order*, juſt after their *file-leaders*. The firſt foure of each *file*, having *preſented*, *fired*, and *wheeled away*; the *laſt foure men* (being the *Reer-halfe files*) in the *interim* of their *wheeling-off*, *ranke* to the *right* and *left* inward: *preſenting*, *firing*, and *wheeling-off*, (as aforeſaid) and placing themſelves in the *reere* of the former part of their *files*, which *wheeled-away* before them. The ſecond *files* are then to *lead forth* and to doe the like, and ſo ſucceſſively, the *reſt*, untill they have all *fired over*, this way.

For further direction to this firing turne to cap. 73.

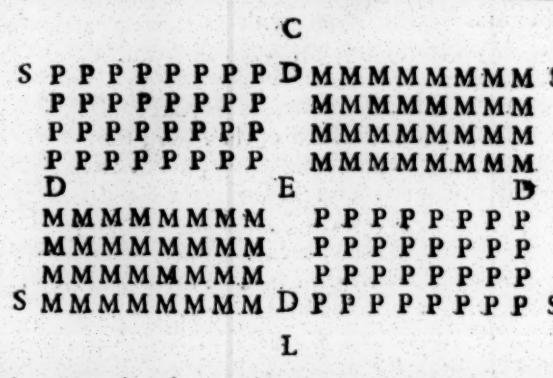
For the ſecond *Firing*, let the *outer-moſt files* lead forth to the ſame *diſtance* before the *Front*, whither being come, as to the *place* wherein to doe their *execution*, let the *Files ranke* to the *right* and *left inward*; and ſo *fire altogether*: *wheeling-off*, and placing themſelves as in the former *firings*. The reſidue of the other *files* of *Muſquettiers*, at the ſame time *marching forth*, *giving fire*, and ſtill placing themſelves *file-wiſe*, on the *innermoſt part* of their owne *diviſions* of *Muſquettiers*, and next to the *out-ſide* of *Pikes*.

As in c. 92.

For the third *firing*, ſend forth the foure *firſt rankes* about *ten paces* before the *front*, Let the two firſt *rankes preſent* together, the ſecond *ranke cloſing forwards*, and *preſenting* between the *Intervals* (or ſpaces) of the *firſt rank*, and ſo poure out their *ſhot* together. When they have *given fire*, let the *firſt rankes firſt wheele-away*, the ſecond *ranks* following them. The other *two ranks*, *cloſing*, *preſenting*, *firing*, and *wheeling-away*; as aforeſaid, falling in the *Reere* of their owne *diviſions* of *Muſquettiers*. The next foure *Rankes moving forward*, and doing the like, &c.

Let the fourth *firing* be performed to both *flankes* upon a ſtand: *facing* the whole *body* to the *right* and *left*, there *firing*, *wheeling-off* by *Diviſion*, and *flanking* their *Pikes*. Whilſt the two laſt *Ranks* are *giving fire*, let the *Pikes port*, and when the *Muſquettiers* have *fired*, and *wheeled-off*, let them *charge*.

Having *advanced their Pikes*, *face* the whole *body* to that part where you ſhall find your *file-leaders* of *Muſquettiers*; then will all your *Muſquettiers* be in *front* and *reere*. Next command your *halfe-files* that then are, to double your *front* to the *left entire*, which being done, this following *Figure* will be produced.



This is the fifth firing. Half-ranks of the right, or left-flank both intend the same thing.

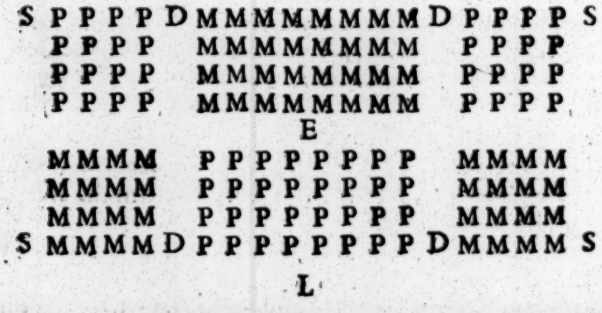
The *Musquettiers* may *give fire* on this *Figure*, to the *Front and Reere*, or to the *right and left*: The *Firing* by me intended, is to both *Flanks*; to which purpose, *face the Body to the right and left by division*. Let the *Drumme beat*, the *Musquettiers make-ready, present*, and *give fire*, all *wheeling-off* to the *left*, and placing themselves in the *Reere of their owne divisions*. The *Pikes* may also *port*, and *charge* as they see occasion. The *Musquettiers* having all *fired*, the *Pikes* again *advanced*, and the whole *Company faced* to their *former Front*, command the *halfe-ranks* of the *right* (both *Musquettiers* and *Pikes*) to *martch*, and the *halfe-ranks* of the *left-flank* to follow in the *Reere*.

The sixth firing.

Having given them some time of breathing, then for the *sixth Firing* cause the *half-files* that then are (*Musquettiers* and *Pikes*) to *face to the Reere*. Which being done, let the *Musquettiers give fire to the Front and Reere*, upon a stand, *wheeling-off* by *division*, and placing themselves in the *Reere* of their *Pikes*; they *moving forwards*, and maintaining the *Musquettiers ground*. The *Pikes* are then to *charge*, when they are cleared of their *Musquettiers*. Which being done, and they again *advanced*, *face them all to their former Front*.

The seventh firing.

For the *seventh Firing*, Command *Halfe-files to double the Front inward, entire*. To which purpose, *open the Front-halfe-files* (both *Musquettiers* and *Pikes*) *to the right and left*, for receiving the *halfe-files* of both *Armes* within them: which being executed, each *Armes* will stand in three *divisions*, as you may perceive by this following *Figure*.



When you intend to *give fire*, Command the *halfe-files to face-about*, and perform the *firing* to the *front and Reere*, *wheeling-off* by *division*, and placing themselves in the *Reere* of

of their own divisions. The *Pikes* may *charge* at discretion. Having *advanced* your *Pikes*, and *faced the whole Body* to you, let your *eighth Firing* be upon the *Checker-Battell* (of eight *divisions.*) To make the which, Command *Left-flanke double the right-flanke by division.* This Command being executed, the *Checker-Battell* is finished; you may *give fire* upon it to the *Front, Reere, and Flanks*, either *standing*, or *martching*: the *Musquettiers* still placing themselves either *after*, or *within their owne divisions of like Arms.* The *Pikes* may also *charge*, as you see occasion, &c. Many *formes* might be made from this *Checker-Figure*, the which for the present I omit: Therefore, Command the *first and last foure Ranks to face to the left, and martch*; being moved cleare of the *standing part of the Body*, let them *close their division*, and *face to the Front again*: this brings them into *six divisions.* Next, Command the *eight inner-most files to face-about*, and *martch into their places.* The *halfe-files* being *faced-about*, and *martched cleare-off*, then are the *Front-halfe-files* to *close their divisions*: this being performed, and all rightly *faced*, the *Musquettiers* will be in the *midst*, and the *Pikes* on the *Front* and *Reere.* Let your *ninth Firing* be to the *Reere* and *Right-flank* together. And to that purpose, First, Command *half-files double your Front to the right entire*: that being done, let the *halfe-files that doubled, wheele their Battell to the right*; and then being *faced to the Front*, they will stand as in this following *Figure.*

These 8. inmost files, are the halfe files of Musquets and Pikes which doubled the front inward entire.

E C

S P P P P P P P P D P P P P D M M M M S
P P P P P P P P P P P P M M M M
P P P P P P P P P P P P M M M M
P P P P P P P P P P P P M M M M

M M M M M M M M P P P P M M M M
M M M M M M M M P P P P M M M M
M M M M M M M M P P P P M M M M
S M M M M M M M M D P P P P D M M M M S

L

As the *Body* now stands *faced*, you may conceive a *Firing* to the *Reere* and *Right-flank*, *martching*; the which may be performed these two severall wayes: * The *Musquettiers* of the *Reere* having *fired*, may *wheele-off* to the *right*, and place themselves next after the *Pikes*, in the *Front* of their owne *divisions.* The *Musquettiers* of the *Right-flank* having at the same instant *fired*, may place themselves in the *in-side* of their *owne divisions next the Pikes.* A second way to place themselves, after that they have *given fire*, is this; The *Musquettiers* which *fire* in the *Reere*, are to place themselves before the *Front of Pikes*; the *Musquettiers* of the *Flank* place themselves on the *in-side* of the *Right-flank of Pikes.* The whole *Body* may stand, and *Pikes charge to the Reere and Right-flank.* If on this *Figure* you would *give fire* standing, then *face the right-flank to the right, and left-flank to the Reere*; and open an *Intervall* in the *middle* of the *left-flank* for the *Musquettiers* to move thorow. The first time of their *firing* the *Musquettiers may place themselves in the Reere of their owne division of shot.* The second time, *they may flanke their Pikes whilest they port.* The third time, *they may fall in the Reere of their Pikes*; they in the mean time *charging.* Let the *tenth Firing* be performed by way of *Extraduction*: the which being done, the *Pikes* having *charged*, and being again *advanced*, First, Cause those that stand *faced* to the *right*, to *wheele their Battell back again to the left.* Secondly, Command the

*Left-flank

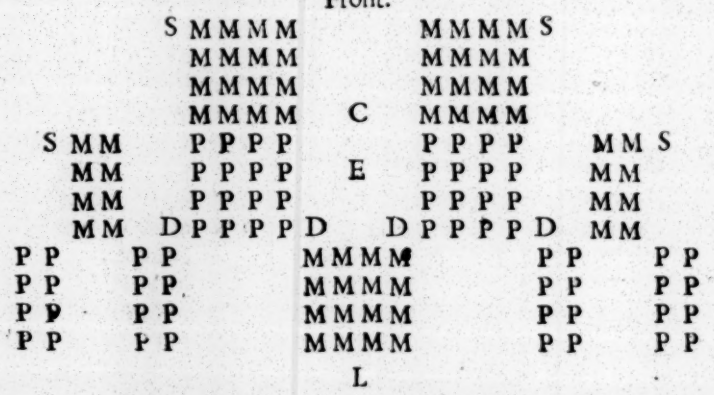
*Note that there must a division be made betweene the midst of the Musquettiers and Pikes of the left-flanke for the Musquets to move through.

Extraduction, as in cap. 80.

Left-flank to march, and the *Right-flanke to follow on the Reere*. This brings all your *Musquettiers* into the *Front* and *Reere*.

The direction to make the following Figure.

Having suffered your *Souldiers* to have a breathing time, come to the eleventh *Firing*. To make the *Figure*, first command, *front-halfe-files* (as well *Pikes* as *Musquettiers*) *open* to the *right* and *left* to a convenient *distance*, (to receive another *division*.) Secondly, Command *halfe-files* of *Pikes* move to the *right and left*, untill you stand cleere of the *Pikes* before you. Thirdly, Command the *foure inner-most files* (of the *Reer-division*) of *Musquets move forwards* to the *Reere* of the *Intervall* betweene the *Pikes*. Fourthly, Command the two last *divisions* of *Pikes*, *open* to the *right* and *left*, and make *Intervals* for the *two divisions* of *Shot* in the *Reer* to passe through: that so they may range *even-a-breast* with the *Front* of *Pikes*. These *Commands* and *Directions* duely executed, produceth this following *Figure*.



On this *Figure* wee will *give fire* to the *Front*; the two first *divisions* may begin the *Firing*, and the first time fall in the *Reere* of their owne *divisions* of *Musquettiers*; the second time of their *firing-over*, they may place themselves in the *Reere of the Pikes*: the *Pikes may charge*, and *the Reer-division of Musquettiers may move forwards*; being *advanced* into convenient ground, they may *present and give fire* together with the *two divisions of shot, on the Wings*. Let them *fire* and *gain ground*, let them *fire* and *maintaine ground*, let them *fire* and *lose ground*, falling back into the *Reere*, behind the *Intervals* of their *Pikes*. All the *Pikes* having *charged*, may *advance*. By this time sable night begins to appeare, and therefore we will come to * *Reducement*. First, Command all the *Musquettiers to close their divisions*. Secondly, Cause the *two Reer-divisions of Pikes* to *close to the right and left inward*, and the *two Front-divisions of Pikes close to the right and left outward, just before the other divisions of Pikes*. Thirdly, Command the *Musquettiers to move forwards*, and *even their Front of Pikes*. All this being done, your *Musquettiers* are in the *midst*, and the *Pikes* on their *Flanks*. Now if you please to *open* the *Musquettiers* to the *Front* and *Reere*, it will make a *hollow Square* for the *Ensigne* to display his *Colours*. If you will come presently to *Reducement*, Command your *Musquettiers* and *Pikes* to *interchange ground*, and all will be perfectly *reduced* as at first. Therefore now let us *lodge our Colours* with our accustomed *Bene vale*, and conclude our *fifth dayes Exercise*; suffering our *Souldiers* to depart to their severall habitations. There leaving them to *cleanse their Armes*, and to *refresh their bodies*, untill the morrowes *clamouring Drum* invite again into the Field.

* *The Reducements. The Musquettiers may soon close their divisions by reason they stand neare all together, being so left in the Firing.*

CHAP

CHAP. CXIX.

The ſixth dayes Exerciſe.

HAving the ſixth time brought your *Souldiers* into the *field*, according to the accuſtomed manner: let each *file-leader* exerciſe his *file*, in the *Poſtures* of ſuch *Armes* as they carry. Which being performed, and the *files* againe re-joyned into one *Body*, the *Enſigne* being at the head of the *Pikes*, and the reſt of the *Officers* in their ſeverall places. The *Captaine* having commanded *ſilence*, *attention*, and *obedience*, (three eſpeciall properties, moſt neceſſarily requiſite to every *Common Souldier*) he proceeds to the ſeverall *diſtances*; inſtructing them in the *uſes* of each of them. Next after the *diſtances*, he teaches them the *Facings*, the *Doublings*, the *Counter-martches*, and the *Wheelings*, with ſeverall obſervations upon each of the *motions*. After which (having ſo *commanded*) the *Drummes beat*, and the *Muſquettiers make ready* for *Skirmiſh*. Then (if you pleaſe) you may cauſe three or foure of the *firſt firings* to be performed by *light skirmiſhing* before the *front*, and that with *looſe rankes* or *files*, or both: either ſome of thoſe, (or ſuch like) as I have formerly ſpoken of in the preceding *Exerciſes*. After which, for your *next firing*; cauſe your *halfe-files* to open to the *right* and *left* by *equall diviſion*, untill the *Reer-diviſions* of *Pikes*, ſtand right after the *Muſquettiers* of the *front-diviſion*. Now the *Muſquettiers* ſtanding in *foure diviſions*, let them all *preſent* and *give fire* to the *Front*: *wheeling* all off to the *right*, and placing themſelves in the *Reere* of their owne *diviſions* of like *Armes*, each *Ranke* ſtill making good the *leaders ground*. Having *given fire*, *once*, *or twice* over on this *figure*: For the ſecond *firing*, cauſe the *Front-diviſion* to *give fire* to the *front*; and the two *Reer-diviſions* to each *flanke* in a *martch*. The *front-diviſion* which *fires* in *ranke*, *wheele all off* to the *right*; *placing* themſelves in the *Reere* of their owne *diviſions* of *Muſquettiers*; the other *Diviſions* which *fire* in *flanke*, leading up their *files* betweene their owne *Diviſions* of *Muſquettiers* and the *Pikes*.

The firſt firing by foure diviſions to the Front.

The ſecond firing is to the front and both flankes marching.

Having *given fire once or oftner over*, according to diſcretion this way; let the third *firing* be performed upon a *ſtand*. For the which, cauſe your *Reere-diviſions* to *face* to the *right* and *left out-ward*: the *Front-diviſion*, ſtill to continue the ſame *aſpect*.

The third firing is to the front and both flankes ſtanding.

Then, Let the *Muſquettiers give fire*, thoſe of the *right flanke*, *wheeling-off* to the *right*: and the contrary *flanke*, to the contrary hand; the *Muſquettiers* of the *Front-diviſion*, placing themſelves in the *Reer* of their own *diviſions* of *Muſquets*; The *Muſquettiers* of the *Reere-diviſions*, *placing* themſelves in the *Reere* (of the *Reere-diviſions*) of *Pikes*. When they have *fired* all over, let the *Pikes charge*, to *front* and both *flanks*.

The fourth figure is to the reer and both flankes marching.

Having advanced your *Pikes* againe, and *faced* your *Body* to the *Front proper*, each *Armes* ſtill ſtandeth in three *diviſions*. Then let the fourth *firing* be to the *Reere* and both *flanks* upon a *martch*. And to that end, open your *Front-diviſions* of *Muſquettiers* to the *right* and *left*, untill they are cleere of the *Reere-diviſions* of *Pikes*: that ſo they bee not troubleſome unto them in their *martch*. Then let your *Pikes ſhoulder*; and the *Muſquettiers give fire*: the *Front-diviſions* of *Muſquettiers*, *firing* in *flanke*, and *leading up* on the in-ſide of their owne *diviſions*. The *Muſquettiers* of the *Reere-diviſions* giving *fire* in the *Reere*, in *ranke wheeling-off* by *diviſion*, and placing themſelves in the *Front* of their owne *diviſions* of *Muſquettiers*. Having *fired once over*, and the *Pikes charged*, let your fifth *firing* bee to the *Reere*, and both *flanks* upon a ſtand. In the which, let the *halfe-files* (both of *Muſquettiers* and *Pikes*) *face* to the *Reer*; the *front-diviſion* to the *right* and *left*, and ſo *give fire* on each part: thoſe that *fire* to the *flanks wheeling-off*, and placing themſelves in the *reere* of their *diviſions* of *Pikes*, and the *Muſquets* of the *Reer-diviſions*, *wheeling-off* to the *right* and *left*, and placing themſelves in the *Reer* of their owne *diviſions*

The fift firing is to the reer and both flankes ſtanding.

of *Muſquettiers*; each *Rank* moving forward into their *leaders ground*. Having *faced over*, let the *Pikes charge*. The *Pikes* being again *advanced*, *face* the whole *Body* to the *proper-front*; and then all the *Muſquettiers* will be in the *midſt*, and the *Pike-men* on the *Flanks*.

The ſixt is a firing tripartite as in Cap. 94.

For the *ſixth Firing*, Cauſe your *halfe-ranks* of the *left*, *double* your *right-flank* by *diviſion*. For further *directions*, look back to the *Tripartite Firing*: which you ſhall find *Chap.* 94. Having *fired-over* that way, *charged*, and *re-advanced* your *Pikes*, *face* the whole *Body* to their *former Front*.

The ſeventh is a firing to both flanks in three diviſions.

For your *ſeventh Firing*, Cauſe the *Front* and *Reer-diviſions* of *Muſquettiers* and *Pikes* to *face* to the *right*; the reſt of the *Body* (both *Muſquets* and *Pikes*) to the *left*. Let the *Muſquettiers give fire*, and *wheele* all *off*, either to the *right* or *left*, and place themſelves in the *Reere* of their following *diviſions* of *Pikes*; each *Rank* ſtill moving-up into their *leaders ground*. When their reſt but *two Ranks* of each *diviſion* to *fire*, let the *Pikes* pore. Having all *fired* and *wheeled-away*, let the *Pikes charge*. Then *face* the whole *Body* to their *firſt-front*; and command the *firſt* and *laſt foure Ranks* to *face* to the *left*, and to *march*, untill they are cleare of the *ſtanding part* of the *Body*. Then, Cauſe the *Front-halfe-files* to *face* to the *left*, the *Reere-halfe-files* to the *right*, and ſo to *cloſe their diviſions*; and after that to *face* towards their *Leader*.

This perfectly redeeth the whole body; every man to his place.

The eight firing is the ſollid ſquare girdled with ſhot.

For the *eighth Firing*, make the *ſollid Square girdled with Muſquettiers*. For the which, draw halfe the *files* of the *right-flank* of *Muſquettiers* croſſe the *Front*, and halfe the *files* of *Muſquettiers* from the *left-flank* croſſe the *Reere*. Then *face* the whole *Body* (both *Muſquets* and *Pikes*) to the *Front*, *Reere*, and *Flanks*. This done, let the *Muſquettiers give fire*, and *wheel-off* by *diviſion*, placing themſelves in the *Reere* of their own *diviſions* of *Muſquettiers*.

The ninth firing is to the front and reer upon Captaine Wallers double figure.

All the time of this *Firing*, the *Pike-men* being in the *middle* of the *Muſquettiers*, have good opportunity (if the *Enemy* be neare) to *gall* them with their thick ſhowers of *feathered ſhot*. The *Muſquettiers*, in the mean time, having *fired once*, *twice*, or *oftner over*, on this *Figure*, draw your *files* of *Muſquettiers* back again into their places.

Then having *faced* the whole *Body* to the *proper-Front*, let your *ninth Firing* be (Captain *Wallers double Firing*) *to the Front and Reere*, after this manner:

The tenth firing to both flanks ſtanding.

The bringers up being now the fil-leaders.

First, *Wheele Front* and *Reere* into the *right-flank*: then *face* them all the ſame way they were before: which done, cauſe the *halfe-files* to *face* to the *Reere*, and command the *Muſquettiers* which are in the *Reere* of each *diviſion* of *Pikes*, to *double* their *Front* of *Pikes* by *diviſion*. Then, let them *face-about* and *cloſe* their *diviſions*: and ſo having *refaced* them as they were, let them *give fire*, *wheele-off*, and *charge*, according to directions on Captain *Wallers Figure*.

The eleventh firing is on the diamond figure.

As in c. 78.

For the *tenth Firing*, let them *face* to the *right* and *left*, and *give fire* to both *flanks* upon a *ſtand*; *wheeling-off* by *diviſion*, and *flanking* their *Pikes*.

When the *Pikes* have *charged*, and are againe *advanced*, let the *Captain* paſſe to the *Front-accidentall* of the *left-flanke*, and *face* the reſt of the *Body* to him; and in the next place, *wheele* their *Flanks* into the *Front*, and ſo all the *Muſquettiers* will be in the *Front*: and by *facing* the whole *Body* to the *left*, all the *Muſquettiers* will be on the *right-flank*.

Let the *eleventh Figure* be the *Diamond Battell*. Having *given fire* two or three ſeverall wayes, according to the *directions* upon that *Figure*, *charged Pikes*, and *reduced* them again into the *Square*, *face* the *Body about* to the *right*; and *paſſe* the *Muſquettiers* which belong to the *right-flank* between the *Ranks* of *Pikes* into their places. Then the *Muſquettiers* of the *left-flank* being *cloſed* to their *Pikes*, the *Body* will ſtand at their *firſt Order*.

The Body again reduced.

For

For the *twelfth Firing*, make the *hollow Square girdled with ſhot*: Let them *give fire* upon that *Figure* (both *without* and *within*) according to the *directions* for that *Firing*. Let the *Pikes charge*; and *reduce* them in the ſame manner as I have diſcourſed upon that *Figure*.

The 12. firing is the hollow ſquare girdled with ſhot, as in Chap. 105.

For the *thirteenth Firing*, make the *Pleſium*; as you ſhall find *directions* in the 106. *Chapter*.

The 13. firing as is in Cap. 106.

Having made it, *given fire* upon it, and *reduced* it as at firſt, Let the *fourteenth* and *laſt Firing* for this *Exerciſe* be the *hollow Hearſe and Croſſe*. Turn back to *Chap.* 104. where you may find ample inſtructions for the *making*, *firing*, and *reducing* of it. And laſtly, that you may conclude with *triumph*, cauſe your *Enſigne* to be diſplayed in the *middle* of the *hollow Croſſe*: and then having *fired*, *charged Pikes*, and *reduced* your *men*, according to the directions on that *Figure*, your *men* will be as at firſt. And therefore, ſeeing that by this time night is come, and our *powder* gone, we will here give concluſion to our *ſixth dayes Exerciſe*.

The 14. firing, as in Cap. 104.

Wherefore, that you may obſerve ſome form in the *lodging* of our *Colours*, cauſe your *Muſquettiers* to *martch* in the *Front* of your *Pikes*. Then, as they *martch*, let them *invert* to the *right* and *left*: which is, when the *Ranks file* to the *right* and *left* by *diviſion*. Then, cauſe all your *Muſquettiers* to *face in oppoſition*, to *cock* their *matches*, *guard* their *pans*, and *reſt* their *Muſquets*. In the mean time, let the *Pikes advance*, and *cloſe* their *Ranks* and *Files* to their *Order*. Which being done, the *Captain*, *Lievtenant*, *Enſigne*, and *Drummes beating* a *troop* at the *head* of the *Pikes*, *paſſe through* this *guard* into the appointed place for the *allodgement* of the *Enſigne*. Then, the *Serjeants* cauſe the *Muſquettiers* to *face* all *about* to the *right*, and *preſent*; and upon the firſt *beat* of the *Drum* they all *give fire* in one *volley*. And now having performed our *ſixth dayes Exerciſe*, the *Drum beats a Call*, and makes *proclamation*, that *every man depart unto his ſeverall home untill his next ſummons into the Field*.

A direction to lodge the Colours.

The Rankes of Musketiers are to file to the right and left outwards.

CHAP. CXX.

Of the Brigade: the number and way of drawing up a Squadron. Next, the compoſing three Squadrons into one Brigade. And laſtly, of imbattelling three Brigades, after the manner of the King of Sweden.

FOr as much as that *Military mirrour* of our times, *Guſtavus Adolphus* King of *Sweden*, was found not onely able to wage a *Warre* with the *Imperiall Auſturian bird*; but that hee *ſoared* even to admiration, *pluming* and *tearing* the beſt *feathers* from his *back* and *wings*, none of his *Commanders* nor *Generaliſimo's* being able to withſtand the *torrent* of his *victories*: It cannot be denyed but that (next under *God*) his *Diſcipline* and new manner of *Imbattelling* was a great (if not the greateſt) means for the atchievement of the height of his deſignes. And therefore, as in all the former part of my Book I have explicated and ſet forth the *Poſtures*, *Motions*, *Firings*, and *Figures* of *Battell*; to be practiſed by *Files*, *Corporalſhips*, *Diviſions*, *Companies*, *Squadrons*, and ſome for larger *Bodies*: So have I delivered and demonſtrated them all by the number of an hundred twenty eight men. Whereby all ſuch as have a fancy or delight in the exerciſe of the *Infantry*, may be ſo enabled to the work, that they need not continually pore upon two or three *Firings*, thereby breeding *ſatiety*; but with delectation to themſelves, and profit to their *Souldiers*, may exerciſe their *bodies* with more *variety*. Unto which purpoſe, I have alſo added for the cloſe of this my Book, the number, and manner of *Imbattelling* into that *form* of the *Swediſh Brigade*, which hath proved ſo fatall a *Figure* to the Houſe of *Auſtria*.

Philips *new Diſcipline raiſed the Macedonian glory.*

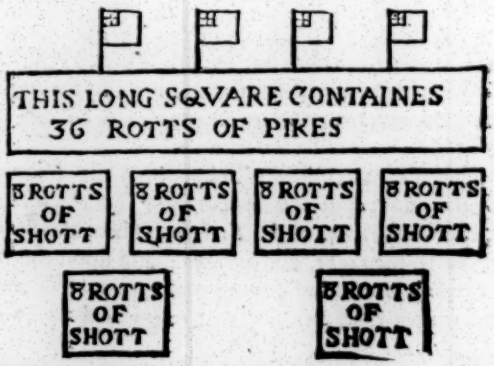
All the Figures in my Booke are ſhewn with the number of 128. men.

The knowledge whereof, as I aſſume not particularly to be mine owne, but a collection: So the *Figure* ſhall be drawn-up according to its owne *Tearmes of Art*, and *Words of Direction*. And therefore, for the better ſatisfaction of the deſirous, wee will begin with a *file*, and ſo proceed untill wee have formed a perfect *Brigade*. Firſt, you are to note that *ſix men* make a * *Rot*: *Three Rots* of *Pikes* makes a *Corporalſhip*; but the *Muſquettiers* have *foure Files* to a *Corporalſhip*: *Three Corporalſhips* of each *Armes* makes a compleat *Company*: that is to ſay, *nine Rots* of *Pikes*, and *twelve Rots* of *Muſquettiers*, twenty one *Rots* together; which amounts to the number of one hundred twenty ſix men, beſides all *Officers*, *Muſter-youngs*, and *Paſvolants*: *foure* of theſe *Companies* make a *Squadron*; and *three* ſuch *Squadrons* formes a perfect *Brigade*. The *Squadrons* are ſometimes drawn-up as this following *Figure*.

* *File.*

One of theſe ſquadrons containes 504. men whereof 408. are ſometimes drawn up as in this Figure. Sometimes they are arranged all abreſt, four corporalſhips being alwaies left in the reer as a reſerve. Of this more in the Intelligencer.

A Squadron or third part of a Swediſh Brigade.



By the ſtanding of this *Squadron*, or third part of a *Brigade*, you may eaſily perceive how apt and ready they are to be *Imbattelled* into any *form*, either *offenſive* or *defenſive*. But becauſe I in this Chapter intend no other variety, but onely to ſhew the drawing-up of the *Brigade* it ſelfe, therefore proceed we to the demonſtration thereof, as it is ſet forth and expreſſed in words, by Collonel *Robert Monro*, in his Book, entituled, *Monro his Expeditions and Obſervations*. His *directions*, in effect, are as followeth.

126. Men a compleat Company.

Plottons are ſmall diviſions.

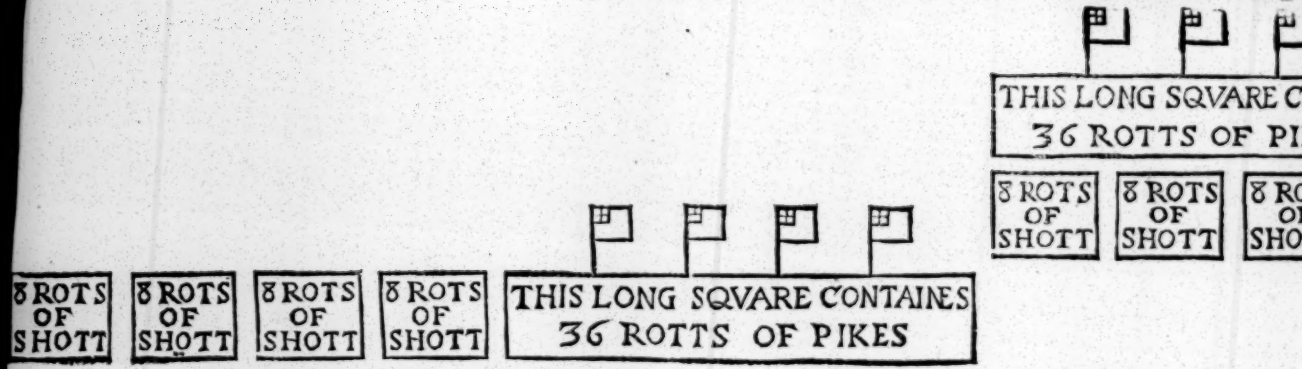
"Twelve compleat *Companies* make up three *Squadrons*: every *Squadron* of *Pikes* and "*Muſquets* being drawn-up ſeverall a-part; the *Pikes* and *Colours* on the *right-hand*, the "*Muſquettiers* on the *left*. Three *Squadrons* thus drawn-up, compleats a *Brigade* of *Foot*, "to be divided as followeth: (*viz.*) Eight *Corporalſhips* of *Muſquettiers*, being thirty "two *Rots*, divided into foure *Plottons*, every *Plotton* being eight in *Front*, led-off by a "*Captaine*, and every *Diviſion* after him led-up by a ſufficient *Officer*; till coming to a "*hault* all are drawn in *even-Front*. Next after theſe, the thirty ſix *Rots* of *Pikes* are to "follow (being twelve *Corporalſhips*) with their *Colours*; a *Captaine* leading-off the "firſt five *Rots*, before the foure *Colours* ſhould ſtirre. Then the *Enſignes* ſhould lead-off "the next *Diviſion*; their *Furers* with their *Colours* following them, till they are drawn-"up even in *Front* with the thirty two *Rots* of *Muſquettiers*. This makes the *right-*"*wing* of the *Brigade*. Secondly, The *Battell* of *Pikes* moveth forwards in *Diviſions*, "doing in all reſpects as the former, untill they *range-even* in *Front* with the *Pikes* of the "*right-wing*. Then the other thirty two *Rots* of *Muſquettiers* belonging to the *middle-*"*Squadron*, (who are appointed to make the *Battell* of the *Brigade*) are to be led-up as

Even with the front but on the left flanke.

"the

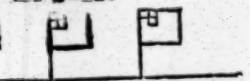
ROY
OF
SHO

The Swedish Brig

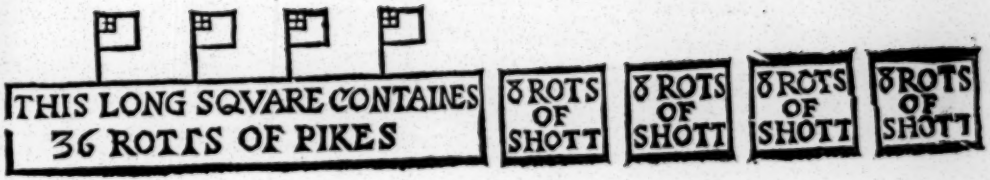


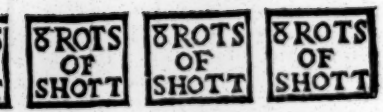
Place this between *Folio* 172 and 173.

Brigade.


ARE CONTAINES
OF PIKES

8 ROTS OF SHOTT
8 ROTS OF SHOTT


THIS LONG SQVARE CONTAINES
36 ROTTS OF PIKES
8 ROTS OF SHOTT
8 ROTS OF SHOTT
8 ROTS OF SHOTT
8 ROTS OF SHOTT


8 ROTS OF SHOTT
8 ROTS OF SHOTT
8 ROTS OF SHOTT

" the firſt Muskettiers in all points: but to be drawn up at a reaſonable diſtance, behinde " the Pikes of their owne Squadron. Thirdly, The laſt Squadron of Pikes marcheth up, " in all reſpects obſerving the former order: moving forwards, untill they have attained " to range even in Front with the other Pikes. After them marcheth forwards the thirty " two Rots of Muskettiers (in foure diviſions) obſerving the former directions, untill " they are equall in Front with the whole Pikes, which maketh up the left wing.

" This being done, the Battell (or middle Squadron) of Pikes and Muskets are to advance " forwards in one Body, till they are cleare of the *Pikes* and *Muskettiers* of the wings. " Laſtly, the ſurplus of the three Squadrons, being forty eight Rots of *Muskettiers*, are " drawne up behinde the Brigade; where they are to attend the Commands of their Offi- " cers, either to guard the Baggage, or Canon, to be Convoyes to bring Ammunition or Vi- " ctuals to the reſt; or to continue a reſerve to wait upon all occaſions. Obſerve the Fi- " gure of the Brigade, in this place.

Even with the left flank.

The ſurplus of each ſquadron is 16. Rots, which together makes 48. Rots.

A compleate *Brigade* (ſaith Collonel *Monro*) conſiſts of twelve companies, each *Company* containing 126 men. The which is to be underſtood of full and compleat *Companies*. Otherwiſe, and moſt uſually of two Regiments, eight *Companies* making a *Regiment*, conſiſting of one thouſand and eight men. So that one Regiment and halfe, of whole and full companies, would perfect a *Brigade*: or two Regiments of torne and broken Companies, the overplus being alwaies added to the *Reſerve*. Notwithſtanding it ſo happened at the *Battell of Lutzen*, that *Mitzlaff*, *Gerſtorfs*, and *Roſſes*, 3. crazed Regiments, made up but one *Brigade*, being the outmoſt *Brigade* to the left of the ſecond *Range*. And towards night in the ſame forenamed *Battell*, going to *rally up* the two broken and ſhattered *Brigades* of *yellow* and *blew*, belonging to *Grave Neeles*, and Collonel *Winkle*, there were not men enough left unhurt and killed, wherewith to make one Squadron (or third of a *Brigade*) to make another charge. Let this ſuffice both for the number and order for the drawing up and making the *Swediſh Brigade*. If any be deſirous to know the places of the *Commanders* and Officers of the *Brigade*, there is a draught communicated by my Lord of *Reay*, and ſet forth in the *Swediſh Intelligencer*.

The Swedes have but 8. Companies in a Regiment.

Look the Swediſh Intelligencer.

The deſcription of the Battell of Lutzen, pa. 168. The Intelligencer.

I ſhould now ſhew you the manner how the *Muskettiers* performe their firings on this *Figure*. The which by all *information* that hitherto I could gather, have beene theſe two: namely by * *advancing* or gaining ground; or by *Salves*, powring on ſhowrs of Lead, by firing two or three Rankes together. I might here adde how uſefull a Weapon our halfe Pikes would prove in this *Figure*: eſpecially, if the adverſe party had any Horſe in the midſt, or betweene his *Regiments*, as it happened *Tilly* to have in his Battell of *Leipſich*. But I willingly forbeare, that ſo I might demonſtrate the ſtanding of three *Brigads* together in order of *Battell*, according to the uſuall and accuſtomed manner of *Imbattelling* by that *Invincible King of Sweden*, of never dying memory; who placed them as in this *Figure* may be ſeene. The Battell of the following *Brigade* being alwaies placed directly behind the *Intervall Diviſion, or ſpace of ground* betweene the two wings of the former *Brigades*.

* *Introduction.*

A ſalve is when 2, 3, or more ranks powre out all their ſhot together in one volley, as we uſually doe with our halfe Pikes.

This paines, *Gentle Reader*, have I taken for thy good, the which if it find a kindly and courteous *Acceptance*, ſhall be to me a *guerdion*, or ſatisfaction ſufficient for my labour and patience. As for the *Envious, who (like the dog in the manger) will neither eat himſelfe, nor willingly ſuffer them that would.* It muſt bee imputed to their *Cinicall* diſpoſitions: who *ſquare* other mens *endeavours* according to the *crooked line* of their owne *conceits*. Condemning things *commendable in others*; but neither ſaying or doing any thing conſiderable themſelves. Another ſort there be, that would ſeeme to carry the *Port of knowledge* about them, yet infected with ſo much *malignity*; that being requeſted of their *opinions*, they will anſwer with an *Italian ſhrug*, or ſome ſuch like *mimick geſture*: thereby inſinuating a kind of doubtfulneſſe of things amiſſe, when themſelves are not able to *render a reaſon* of their *diſtaſte*. I have been toucht with the venom'd teeth of a *third ſort*. Who have rendred themſelves ſo *irrationall*, and *ſtupidly beſtiall*; that their *tongues* ſerve them but as *inſtruments to wound and goare the Reputations of men, then themſelves much more deſerving*. But ſeeing that to *diſplay their follies*, were but to *ſoile the purity of my ſubject*: I will leave them to the amendment of their *errors*. Deſiring once more of the *Courteous* (and well-knowing *Readers*) that they will put a *faire* conſtruction on mine, and the Printers *overſights*: by which they will not onely *demonſtrate* the *goodneſſe* of their owne *diſpoſitions*; but put a further *Obligation* upon him, that will ever be ready to ſerve them.

The Glory be to God.

FINIS.

The CONTENTS of every CHAPTER contained in this BOOK.

Chap. 1. Page 1.

Concerning Postures, and handling of Armes. 1
The Postures of the Musket. 2
2 Of the Postures of the Pike. 3
3 Of the Drumme. 4
4 Of Ranks and Files, their places and Dignities. 5
5 Reasons for precedency of dignity in Rankes and Files. 6
6 Of severall Distances. 10
7 Of marching a Company in divisions, order, and places of the Officers. 12
8 Of drawing the Divisions up into a square. 13
9 What is facing, and the use of the Word, whether to be used, or refused. 14
10 Of facing square, and how to perform it, the usefulnesse of Facing, and the severall parts thereof. 15
11 Of Doubling the use and parts. 17
12 Of Inversion and conversion, and of doubling Rankes. 19
13 Of doublings of files. ib.
14 Of doublings by Bringers up. 20
15 Of doublings of files outward and inward. 21
16 Of doubling by halfe-files. 22
17 Of doubling the Reer by front half-files. 23
18 Of doubling the Reer by Countermarch. ib.
19 Of doubling flankes by way of countermarch. 24
20 Of doubling halfe files to the right to accommodate the doubling of half-rankes. 25
21 The difference between intire and divisionall doubling, and of doubling half intire. 27
22 Of doubling the Front inward intire. 28
23 Of halfe files doubling the Front by division. 29
24 Of doubling the Reere by division. 30

Chap. Page.

25 Of doubling the Reer intire, by the front half files. 31
26 Of doubling by halfe Rankes intire. 32
27 Of doubling of flankes by division. 33
28 Of doubling Rankes intire. 34
29 Of doubling files intire, advancing. 35
30 Of files doubling their depth. 36
31 Of Conversion and inversion, with their words of command, and reducements. 38
32 Of Files filing in sequence. 39
33 Of inverting ranks, or ranks filing. ib.
34 Of rankes filing by division, and how usefull. 41
35 Of the severall parts of Conversion, and how they are to be understood. 42
36 Of Rankes wheeling by Conversion. 43
37 Of Files ranking in equall parts. 45
38 The conclusion of Doublings. 46
39 Of Countermarches. Their antiquity, and words of direction. 47
40 Of the Chorean Countermarch: and the way to perform it. 48
41 Of Countermarching to loose ground. 49
42 Of Countermarches to gain ground, or the Macedonian Countermarch. 50
43 Of the Bastard Countermarch. 51
44 Of Countermarching Rankes to maintain ground. ib.
45 Of Countermarching Ranks to loose ground. 52
46 Of the Macedonian Countermarch by Ranke. 52
47 Of Countermarching Front and Reer, into the middest. 53
48 Of bringing Front and Reer together into the middest by the Bastard Countermarch. 54
49 A divisionall Countermarch, to make a large Intervall, between the first

Chap. Page.

and last Ranke. 55
50 Of making a large Intervall between the first and last Rankes, by the Macedonian Countermarch. ib.
51 Of interchanging the ground. 56
52 Of Countermarching the flankes (or wings) into the midst of the Battel. 57
53 Of Countermarching to take the ground before the flankes. 58
54 Of Countermarching to take the ground on the outside of the flanks, and to direct their aspects inwards. 59
55 Of taking the ground on the outside of the flanks not altering the Aspects. 60
56 Of interchanging ground by the flankes, and bringing the innermost files of Pikes, to become the outermost Rankes. 61
57 Of Wheelings, their kinds, and uses, with their severall words of Command. 62
58 Of wheeling Angular. 63
59 Of wheeling on the Center. 64
60 Of wheeling-off by Division. 65
61 Of wheeling the Front inward toward the Reer. ib.
62 Of bringing the Flanks into the Front of the Battell. 66
63 Of wheeling the Reer into the midst of the Battell. 67
64 Of wheeling the right-flanke into the midst of the Battell. 68
65 Of wheeling the left flanke into into the midst of the Battell. 70
66 Of wheeling front and reer into the midst of the Battell. 71
67 Of wheeling the flankes into the midst of the Battell. 72
68 Of making men file-leaders successively, the files being eight deep. 73
69 Of making men file-leaders successively, the files being but six deep, 75
70 Of making men file leaders successively, according to their precedency and dignity in file. 77

Chap. Page.

71 Of making men file-leaders by dignity, the files being but six deep. 78

72 Of drawing the files again into a body, and preparing them for skirmish. 79

73 Of firing by forlorn files, the manner, and the use. 81

74 Of firing by two rankes, ten paces advanced before the front: next even with the front; and lastly, even with the half-files. 82

75 Of the Horn-Battell how to make it, and to reduce it by firing. 85

76 Of the Demy-hearse battell: the use of the Figure, how to make it, and to reduce it by firing. 86

77 Of giving fire advancing, by way of introduction, with the beneficiall use of the Bow and Pike. 87

78 The way to make the Diamond battel; severall waies to fire upon it, with divers other figures and firings which are thereby produced. 88

79 Of the Convex halfe Moon; the use of the Figure, and of the severall waies of firing upon it. 91

80 Of Extraduction: with severall uses, firings, and reducements. 93

81 Of the broad fronted battell, with the waies of firing upon it. 94

82 Of dismarching or firing in the Reere, the severall waies, and how they ought to be performed. 96

83 Of firings in flanke in generall, and more particularly of the gathering firing. 98

84 The second manner of giving fire to the flanke. 99

85 A firing in flank led off by the bringers up. 100

86 The differences between firings in flanke marching, and of bringing the Musketiers on the outside of the Pikes. 101

87 Of firing in flanke, and placing the Musketiers in the midst of the battell of Pik with other Firings from thence ceeding. 103

88 Of firing to the front and reer upon a march. 104

Chap Page.

89 A second way of firing to the front and reere. 105

90 Firing to the reer and right flank marching. 106

91 Firing to both flanks marching. 108

92 A firing to both flankes standing. 109

93 Captain Wallers triple firing to the Front. 110

94 A firing Tripartite, doing execution to the front, reere, and right flanke. 111

95 Of the Sconce Battell. 112

96 Of firing by three files at once; two of them standing oblique, the other direct. 113

97 A firing oblique, by foure files together, in forme of a W. 114

98 Of the fort Battell; the way to make it, and to reduce it 115

99 Of the Crosse Battell how to make it with a private Company: the way to fire upon it, with other discourses, concerning the necessity inforcing that figure: with the meanes to make it more defensive, and serviceable; and lastly, the way to reduce it. 116

100 Of the hollow fronted Crosse-battel, how to make it with a private Company; and the way to fire upon it. 119

101 Of firing upon the square Battell, flanked with Pikes. 120

102 Of the ancient manner of imbattelling the Plinthium: the placing of each Armes, and the use of the figure. 121

103 Another hollow square for march. 123

104 Of the Hearse-battell, and of the hollow Hearse and Crosse. 124

105 Of the hollow square girdled with shot. 126

106 Of the solid square, with Musketiers in the Center and Angles, the way to make the Figure with a private Company: how to fire upon it, and to reduce it. 128

107 Of the double Crosse-battell, and severall other formes from thence proceeding. 130

108 Why it is necessary to know variety of formes, the way to make four severall figures demonstrated in this Chapter, with their reducements. 133

109 The Trained Bands one of the three main strengths of this Land, the waies to make them perfect Souldiers in handling of their Armes: The Checker battell, with severall other formes, either for a Company or Regiment. 135

110 How a Captain or superiour Commander ought to be qualified, what is requisite to every common Souldier; the use of variety of formes and figures of battell, with severall Regimentall formes that may be practised with a single Company, and the Reducements. 139

111 Of the Musket and Halfe-Pike, with the severall waies that have been tried to make the Musketiers defensible against the Horse: as also ten queries objected to the Halfe-pike as Muskets. 144

112 The ten queries objected to the Musket and half-Pike fully answered. The half Pike joyned with the Musket approved to be very usefull; as having received approbation from divers souldiers of great ranke and quality. 146

113 Of the halfe-Pike, how it may bee serviceable on all formes: with severall figures, indifferently usefull to the half Pike or Rest, with the postures of the halfe Pike and Musket. 149

114 The first dayes Exercise. 154

115 The second Dayes Exercise. 155

116 The third dayes Exercise. 157

117 The fourth dayes Exercise. 160

118 The fifth dayes Exercise. 164

119 The sixth dayes Exercise. 169

120 Of the Brigade, the number and way of drawing up a Squadron. Next the composing three Squadrons into one Brigade. And lastly, of imbattelling three Brigades, after the manner of the manner of the King of Sweden. 171

FINIS.